

Newsletter No.21: November 2021

There is no further update to Covid-19 rules in Scotland and the following is still extant:

Scotland moved to "Beyond Level 0" on 9th August 2021. Legal restrictions on physical distancing and the size of social gatherings are now lifted. Members remaining outdoors at the club no longer need to complete the Track & Trace email. Anyone using the club hut should leave the doors open where possible and still continue to use the Track & Trace system. KRMFCtrackandtrace@gmail.com

See Covid 19 – Release Bulletin No. 7 for more details on the SAA Webpage. https://www.saaweb.uk/

KRMFC current committee members are:

Tom Wilson – Chairman Neil Grayson – Interim Secretary Mike Hill – Interim Treasurer Bob Gadd – Committee Member Jim Walsh – Co-opted Committee Member George Robertson – Co-opted Committee Member

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

BMFA Affiliation

KRMFC is now affiliated to the BMFA. Many thanks to Mike Hill for signing us up. This means we are insured for up to £10,000 for Buildings and Contents. If anyone who is with the BMFA would like to make KRMFC their main club then please forward Mike Hill your details. He will need the name and email address you used for registering with the BMFA and your BMFA number. As a BMFA member, if you do not want KRMFC to be your main club, could you again let Mike know.

A note of caution if you climb the stile into the field to the west. The stile is in a bad state of repair. The second step up broke off when Neil and Billy climbed it on the nearside and large nails are sticking out. On the field side the bottom rung has moved and again nails are sticking out. Of course, if you don't crash your plane you won't need to use the stile (yeah right!).

It was noticed that the pole for the wind sock has disappeared, is it in the shed? If anyone knows the whereabouts please send an email to the committee or let members know on the WhatsApp group.

Glow Fuel for Sale

The club still has a stock of fuel for sale. 20% nitro has nearly run out so more is on order. 20% nitro is £30 a gallon and 5% is £24 a gallon. Please note that the containers are full gallons and not 4.5 litre cans. See/contact Tom Wilson or Mike Hill if you want to make a purchase.

Article 16

The following is the latest statement from the SAA in regard to ARTICLE 16. (No change from last month!).

Update 6th August 2021

Following confirmation from Tysers, our insurers, *it is not possible to fly under Article 16 as an associate member of the LMA using SAA insurance*. This is due to changes in the way liability is covered and is not the result we were hoping for.

The LMA have however offered full membership starting from 1st September 2021 and ending 31st December 2022 for £30, the BMFA have a reduced membership of £29 but only covers you until 31st December 2021.

It has been confirmed that if joint full membership of the SAA and either the LMA or the BMFA are held, then the LMA or BMFA insurance will provide cover when flying under Article 16.

SAA members can continue to fly in the open category under the SAA insurance, however, should any member of the SAA wish to fly under Article 16, they will require full membership of either the LMA or the BMFA.

Note: Although Article 16 permits flying above 120m(400ft), the Maximum Take-Off Weight (MTOM) of a powered aircraft must not exceed 7.5kg including fuel. For gliders the MTOM is 14kg and they can be flown at a height greater than 120m above the ground directly beneath them, but no more 120m above the pilot.

I hope this clarifies the situation, but feel free to contact me if you are unsure.

In the meantime, the team are working hard to regain Article 16 authorisation and the Council, thank you for your continued patience, support and understanding.

Happy landings

Steve McDonald SAA Chairmain

Newsletter Feedback and Contributions

Please let Neil or Alan know of anything you would like to see included in the Newsletter. Also, any feedback is much appreciated. If anything interesting happens whilst you are there send us an email (with pictures) for the Activities at the Field section. Articles are always needed and are a very popular read. Members are interested in how you got into the hobby, what planes you have owned etc...

Normally, we aim to publish the Newsletter around the 1st of each month. Email addresses for articles are: <u>alnvkrmfc@gmail.com</u> or <u>krmfcng@gmail.com</u>.

Setting up your First Trainer by Neil Grayson

Centre of Gravity (C of G).

The centre of gravity of a model plane is where the plans or instructions indicate. This should show a range of positions and you should aim for somewhere in the forward half of that range. The actually centre of gravity can vary for a particular aeroplane design as it depends on all-up weight, size and location of the fuel tank and battery and models are never built exactly the same (more glue here, less glue there!).

To find the balance point on a high wing model use one finger under each wing at the same distance from the fuselage on each side until it balances with the nose slightly down. If it is in the wrong place add weight or better still move the receiver battery forwards or backwards until it is in the correct place. If it is a low wing model it is easier to check the balance point with the plane upside down.

it is always good practice to check the lateral balance of a model as well. Do this by holding the model in the centre beneath the engine with one hand and use the other hand to hold the fuselage at the extreme rear, again in the centre. Now make sure that the model doesn't rotate either left or right. If it does, add a small amount of weight to the opposite wing until it hangs level.

Landing Gear

If your aeroplane has a tricycle layout for the landing gear then it is important to have your main gear located correctly on the fuselage. If the main gear is placed too far towards the tail, then there will be too much weight on the nose wheel. This makes steering at speed too sensitive and it will require a lot of up elevator to lift the nose and take to the air. A good test is to push down on the stabiliser to lift the nose wheel. That way you will find out how much weight the elevator has to overcome. Too much weight on the nose wheel will give you an overly steep take-off and a long take-off roll to gain enough speed. On landing the nose wheel is likely to come into contact with the ground first which will add to wear and tear and likely require the nose gear to be straightened and the steering screw to be tightened again.

With the fuel tank empty the optimum location for the main gear should make the nose wheel sit very lightly on the ground. Adjust the main gear location by moving it physically forward or if that is not possible then bend the wire to move it forward.

Attitude Adjustment

Ensure that when your model plane is sitting on level ground it doesn't have a nose up or nose down attitude as this will have a strong effect on how much elevator control is needed to get airborne. The wing should be at a small but positive angle of attack.

A nose-up attitude can cause the plane to tip up on take-off, a case of 'wheelbarrowing' when a high speed is reached because all the weight is carried on the nosewheel (just like a wheelbarrow!). On landing the nose wheel will touch down first causing bouncing which will bend the wire undercarriage.

With a nose-down attitude the model needs to accelerate longer on the runway until sufficient airspeed is built up for the elevator to be able to gain enough force to lift the nose. Once the up-elevator does finally take hold the plane will leap into the air in a steep climb which is likely to cause a loss of airspeed and control.

A properly set-up trainer will take to the air with just a small degree of up-elevator when the airspeed is just right to balance the weight of the plane. Flat bottomed winged trainers should lift off by themselves with no up-elevator when the plane reaches take off speed.

Nose Wheel

One of the most difficult aspects of configuring pushrods and servos I find is getting the nose wheel to operate correctly. There never seems to be enough space between the firewall and the steering arm for free movement for the pushrod and of course the engine always gets in the way! Trying to get the run from the servo to the steering arm is very difficult to get straight. Sometimes the best way to do it is to fit another servo into the servo tray solely for the nosewheel then pair it with the rudder servo on the transmitter so they operator as one.

If there isn't room for another servo then you are stuck with trying to get one servo to operator the rudder and the



nose wheel, not an easy task in my experience. Getting the proper ratio between the rudder and nosewheel throw can be obtained with the rudder pushrod connected to the outside hole of the servo arm and the nosewheel pushrod connected to the innermost hole of the servo arm and the outmost hole of the steering arm. Whether this is on either side of the arm or the same side of the arm depends on your setup.



As too much steering throw can make it difficult to steer straight at speed you should only need about 5 degrees each way turn at the nose wheel. There is absolutely no need for a model to turn within its own wingspan.

Servos

- 1. The first thing fitted to your servos are the rubber grommets then the brass ferrules are pushed into the grommets from the underside never the other way round.
- 2. When the servos are secured to the hardwood rails the plastic case shouldn't come into contact with any other part of the plane. Damage can be caused by the engine vibration if they are in contact with the fuselage.
- 3. If you are using a ply tray, the ply should be doubled or tripled in thickness at the fixing points. Pilot holes should be drilled first so that the wood doesn't split and the screws shouldn't protrude through the tray otherwise the wiring could become worn.
- 4. Ensure that the holes in the servo arm are not too tight otherwise linkages won't move freely. Also if the hole is too large you will get slop.
- 5. Make sure that the servo arms don't clash when they are moved. Cut off any servo arms that are not being used so that they don't get in the way.
- 6. Be sure to check that all servos move in the correct direction.

Trimming

On the first flight of your pride and joy it is important to get your plane flying straight and level. It shouldn't turn left or right and you shouldn't need to keep putting in up-elevator to stop it hitting the ground or down-elevator to stop it climbing. At just over half throttle, it should fly straight without climbing or losing height. Use the trim buttons on your transmitter as that is what they are for but once you land adjust the clevises manually so that you can return the trim buttons to the centre.

On a nitro model use a two-position switch to cut the engine. Setting the throw to around 125% usually does the trick.

You often hear model planes described as having character by their owners but what they really mean is that they haven't bothered to trim them properly!

The BMFA – a History by Neil Grayson

Next year is the SMAE/BMFA centenary so I thought a brief history of the organisation may be quite interesting. A number of events are being planned, which will be announced early next year. The BMFA are asking for affiliated clubs to come up with ideas and hold events themselves. (Any ideas!).

The SMAE, forerunner of what is known today as the BMFA originated, at a meeting in the Camden Town Tearoom in North London in 1922. Before this, the Kite and Model Aeroplane Association had been formed in 1909 and shortly after WW1 the London Aero Models Association had revived and took over the assets of the K&MAA, but it was at the Tea Room meeting that the LAMA name was changed to SMAE and it became less London-centric.

SMAE treasurer W.E Evans was the first to import balsa into the UK in 1931.

In 1935 there were only 20 clubs affiliated to the SMAE but the constitution was revised and by the outbreak of war in 1939 there were 100.

An SMAE Emergency Committee kept the Society running during the war despite blackout, bombs and lack of transport. By 1945 there were an estimated 500,000 aeromodellers in the UK.

During the War kits containing balsa were only supposed to be sold to RAF, Observer Corps and official aircraft recognition schools. Obeche was used as a substitute.

Other organisations sprung up such as the Association of British Aeromodellers between 1946 – 1947. In later years organisations such as the Model Pilots' Association and the Model Flying Fields Association also formed but they soon disappeared.

In 1947 the first radio control band of 27.66-28.00 MHz was allocated by the GPO, with a licence required. The first Nationals took place the same year at Gravesend airfield with 685 entries in the six free flight contests.

The Nationals in 1948 were at Sywell aerodrome, near Northampton and entries were much higher than the first year, with 1744 competitors. 456 people competed in the Sir John Shelley Cup for Free Flight Open Power alone. For the first time there was a control-line aerobatic contest for the Gold Trophy.

In 1948 the SMAE became a company limited by guarantee.

Fairlop airfield in Essex had been a major centre of model flying after the War and in 1949 the Nationals took place there, with the first radio control contest attracting 42 entries, of whom 9 actually scored points.

In 1951 the SMAE Control Line Championships were at Wembley Stadium and the Shell Film Unit covered a Control Line display at the Festival of Britain on the South Bank.

In 1957 SMAE chairman Alex Houlberg was made MBE "for services to model aviation". Also, in the late 1950s the SMAE organised two Wakefield World Championships, both at Cranfield, and the Duke of Edinburgh became its patron in 1957. Membership by 1959 was 8,000 in 318 clubs.

In 1961 the first Nationals were held at Barkston Heath and the same year the SMAE ran the first World Indoor Championships, held at Cardington. The following year at RAF Kenley the SMAE ran the World Radio Control Aerobatic Championships, with 13 nations competing. The UK won the team event that year.

The World control line Championships were run at RAF Swinderby in 1966, one of the highlights being Bill Wisniewski's use of a tuned pipe in Speed for the first time.

By the mid-70s the Nationals were so big that it had to be split, with free flight on a different holiday weekend from control line and radio control.

It took from the early 1970s to 1993 for model flying to be recognised as a sport. It was felt that the title SMAE (Society of Model Aeronautical Engineers) 'hobby' and 'aeromodelling' held back the cause. Documentary evidence from oversees nations that already had funding was gathered and the title British Model Flying Association was adopted in the late 1980s.

In 1978 the SMAE moved into its own office premises in Leicester, sharing a building with the British Gliding Association. They also now had a full-time office manager. In 1992 what was by now the British Model Flying Association bought its own premises in Leicester where they have been located ever since. They were opened by its president Air-Vice Marshal Sir Bernard Chacksfield and today it bears his name.



After the first UK model fatality, a hang glider pilot killed by a radio-controlled slope soarer at Devil's Dyke, a Code of Practice for shared use of slope sites was agreed by the BMFA and the BHGA.

In the early 1980s, in order to improve radio-control flying standards and to give non-competitive flyers something to aim for, the radio control Achievement Scheme was launched. Today many flyers, both BMFA members and others, have achieved the A, B or C standard.

Due largely to the hard work of former BMFA Chief Executive Graham Lynn, in 2013 the European Commission has accepted a definition of radio-controlled model aircraft flying that defines the activity as taking place for sporting, competitive and recreational purposes in line of sight of the pilot and excludes them from the restrictions applying to unmanned aerial systems used for military and commercial reasons.

BMFA Buckminster is located on the Leicestershire/Lincolnshire border close to the towns of Melton Mowbray and Grantham and is the National Visitor Centre and Model Flying site of the British Model Flying Association. The site occupies 43 acres of open and largely unobstructed countryside set within a traditional farming estate and presents an ideal location for the sport of model flying to take place. The location represents an important facility for many of the model flying disciplines in the UK and will host an annual programme of events and competitions as well as the opportunity to just turn up and fly.

The objectives of the BMFA remain as:

"The promotion, protection, organisation and encouragement of model aircraft building, flying and development in all its aspects in the United Kingdom"

Their Motto is "United We Achieve"

Let's hope that their objectives continue well into their next century.

Members' Building Projects

Lindsay Dickie

Lindsay Dickie sent me some pictures of his dad's "Tony Nijhuis Westland Lysander" which he has been building for around 6 months. Lindsay has now taken over construction to finish it off. It has been covered in Ceconite light which is a heat shrink fabric used on microlights and light aircraft home builds. It's like a commercial version of Solartex but doesn't have the adhesive on the back so you need to put the adhesive on the structure first using Deluxe materials water based 'Easy Dope'. The first time he has used both materials. It seems to work quite well but takes a lot of coats to fill the grain enough to be waterproof.







The model is scale 1/9th with a 1676mm/66" wingspan and a length of 1257mm/49.5". All up target weight is 2720g/6lbs.

It is being spray painted with Tamiya acrylic paints with a fair bit of freehand to get the fuzzy demarcation line. Once completed it will have a semi-gloss finish with Deluxe Materials fuel proofer. The paint scheme is the colours of the Arco Lysander based at Duxford. Some of the painting was done whilst Lindsay was on holiday in his caravan at East Fortune. Thanks to Dave Kelly who let him borrow his spray equipment after he forgot his compressor.

There is still a fair bit of work to go yet but it is coming on. Roundels and code markings to do and he needs to figure out how to simulate the exhaust ring colouring which isn't easy. A brand new OS52 4 Stroke Surpass had its first few tankfuls through it last weekend.

Vulcan on the Building Board by Charles Malcolm

I've always had a liking for scale models, deltas and pusher aircraft so with the dark nights approaching decided a Vulcan would fit the bill nicely. I've chosen a 68inch wingspan version that was designed by Graham Dorschell and to save cutting out all the ribs and formers etc. have opted for the semi kit, mouldings and wood pack. (what's happened to the price of balsa wood now?)





It could have been fitted with four fan units but for the sake of saving some weight I have opted for two pusher props. OK, they look ridiculous on the ground but once in the air I think they are acceptable and help the flying characteristics. I'm also fitting electric retracts but will it be OK on our grass strip? It should

weigh around 5kg. So perhaps someone could put me straight. I'm going to dry fit as much as possible before going in with the Aliphatic glue, it's a fairly complex plan and it's good to get an idea of how everything fits together before making any mistakes!



Activity at the Field

Sunday 3rd October 2021

Tom Wilson cut the grass today but left the long stuff at 4 inches as it was far too wet. Growth rates are now slowing down and another few cuts should be it for the season.

Just 3 members down the field today: Tom Wilson, Tom Roberts and Bill McDiarmid. Both Tom's flew their helicopters but Bill chickened out as it was too windy for his light plane.

Friday 15th October 2021

When Neil Grayson arrived at 11am Charles Malcolm and Douglas Fulton were down the field already along with Alan, his wife and grandchildren. There had been a slight accident with the grandchildren's Apprentice and it had been put back in the car for repair.

Charles was flying his electric pusher Vulcan and his Autogiro.

There were little spiders everywhere, hanging on hats and covering planes in webs in minutes. Most annoying when they get in your face when trying to fly your plane or hanging off the brim of your hat in your face when trying to land.

Neil was trying to start the ASP 28 on his small trainer. Fuel was now not getting into the cylinder head, previously it wasn't being drawn into the carb which was caused by the idle screw being too far in. He gave up and flew his Boomerang V2 3 times instead.

Douglas Fulton on his second flight of his Boomerang V1 did a tight turn east of the runway but lost height for some reason and the plane failed to climb. Neil looked up and saw the wings tumbling to the ground which explained why the plane lost the ability to fly! After hiking across the field Neil and Douglas found





the fuselage embedded in the mud with the front end totally smashed up. However, the wings were in perfect condition. On inspection of the wing bolts it showed that they had sheared at the heads! The receiver battery was never found so it is presumed it detached from the fuselage before it hit the ground. Douglas has now bought a new Boomerang V2 for his OS46 engine to replace his original Boomerang and he will be along to fly it as soon as he has put it together. At least he has a spare set of wings!

Saturday 16th October 2021

Neil Grayson visited Loch Earn as Seaplanes Scotland had an event there today. It was well attended. A cold day but flat calm with very little wind. A very well organised event with the car park padlocked to stop interlopers parking at that end of the loch. Some of the same flyers were there from the event at Loch Leven in September. Jets, electric and IC planes were all flying with multiple planes flying at the same time.



Brian Barclay and Charles Malcolm were there representing KRMFC and a sometime member of the club, John Carson was also in attendance. Apparently, Sunday was also a good day but there was some drizzle at times. Videos and pictures are available on Facebook <u>Here</u>

Wednesday 20th October 2021

Alan Veitch appeared at the field today but the wind was strong blowing straight down the runway. He arrived late so immediately got his Kingfisher out of the car and straight into the air. Flying was OK and stable but he had to land it like a jump jet even though the Kingfisher likes to touch down with some forward speed. With any forward speed in a strong wind the Kingfisher like any foamie simply climbs like a

rocket. Despite the difficult flying conditions, the chat was good with Alan, Jim McGouldrick, Jim Walsh and Dereck Grater sat putting the world totally to rights. Alan had one more flight but the wind was no better so everyone went home.

There was also a mutilated pigeon in the middle of the runway when Alan arrived. Its head had gone and the ribcage was stripped bare down to the bone. It is suspected a falcon or similar had been busy.



Friday 22nd October 2021

Quite a few people at the field today. Spiders still everywhere. Neil Grayson, Billy Hatley, Alan Veitch, Douglas Fulton, Charles, his wife and grandson William (aged 6). The wind was unpredictable and kept changing direction even between taking off and landing. There was a good breeze from the west as everyone left.

William, Charles's grandson was given a go with Alan's Kingfisher. He did all the pre-flight checks on the runway and then took off under Alan's guidance. He enjoyed the experience of having the transmitter in his hands and having control of the plane. According to Charles he was still talking about it 3 days later! We need to sign him up straight away.

Billy Hatley flew his Super Dalotel. His first flight went well with some great aerobatics but his second flight ended shortly after take-off when he came down in the field to the west. He appeared to lose control but he is not sure why, however, he managed to skilfully glide to a gently landing in the short barley. The only damage was a slightly bent undercarriage and Billy's reputation!

Neil finally got his small trainer engine running after assistance from Charles and Billy. It still idles a little fast but it is getting there. It was all to do with adjusting the idle valve along with the needle valve. Maiden flight completed. There was some trim required on the elevator and ailerons' but nothing serious and it flew well. He did have a concern about the amount of power available from the ASP 28 engine but this was unfounded as there was more than enough power.

Tim Knowles came to discuss registering on the CAA website for his Operator ID as he has no computer just a smartphone. He will try phoning the CAA. (Phoning didn't work, it can only be done by computer – Done!).

There were only feathers left of the mutilated pigeon on the runway. Something has carried it off and eaten it. Was it a buzzard, fox or the Beast of Kinross?

Just as Neil and Billy were leaving the field Brian Barclay appeared in his campervan and trailer. He handed Neil floats for his Apprentice which were a lot larger than he expected. Neil has no excuse now not to take part in the next water event. Brian and Dave Christie were intending to stay for the weekend. Let's hope the weather stays good.

Sunday 24th October 2021

Brain Barclay and Dave Christie were at the field flying their gliders and still enjoying the weekend at the field despite the bad weather on Saturday. Bill flew his beat-up Travel-Air with a Saito 4-stroke and had an enjoyable couple of flights. A couple of the helicopter boys were flying their helicopters.

Not much more seems to have happened at the field due to the poor weather. Lots of rain and wind.... Let us hope that November gives more opportunity for flying.

Sale of Model Flying Equipment

Is there anything you want or have for sale? Send the details including pictures for inclusion in the next Newsletter.

Web Links and Shops

Model Shop Leeds - <u>www.modelshopleeds.co.uk/</u>

Wheelspin Models - wheelspinmodels.co.uk

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

The Balsa Cabin - www.balsacabin.co.uk

The Vintage Model Company - www.vintagemodelcompany.com

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

Scoonies - <u>www.scoonie-hobbies.co.uk.</u> 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 - <u>www.densmodelsupplies.co.uk.</u> Excellent for spares for vintage Cox engines.

Hobby King - hobbyking.com/

WestonUK – <u>www.westonuk.co.uk</u> Good value fuel in large quantities. Over 20 Litres (4 Gallons) gives you free postage.

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

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

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

RC World - <u>www.rcworld.co.uk</u>. 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 suppliers warehouse. Derek Grater has used and recommends.

Stay well and safe. Good flying!