



**Impington  
Model Aeroplane Club**  
Founded in 1946 by Ray Malmström

edited by Alan Paul  
alanpaul@outlook.com

Website <https://ivcmac.bmfa.uk>

## Indoor flying

Exciting news!! Indoor flying starts every Thursday in the gym from 16<sup>th</sup> September and every Saturday afternoon in the Sports Hall from 18<sup>th</sup> Sept. Saturday afternoon events will alternate with FF one week and RC the next.

In the run up to Christmas, the Saturday sessions will be free to members as we obviously saved a load of money last winter with the lack of flying. After Christmas the Saturday events will continue but will be charged at £5 per session.

Please check the website calendar regularly for full details including Covid precautions etc. <https://ivcmac.bmfa.uk>

## Richards KK Invader mod



Richard first built an Invader when he was 10 and at first glance this looks like a fairly standard RC conversion with an electric motor up front, but it hides a secret control mechanism....



This picture shows a down command.



This picture shows a left turn command.

There are no elevators, rudder or ailerons, but the whole of each wing section moves independently with a mix set on 2 servos.

The model is about a year old and flew incredibly well. Richard says he had known of 'wingerons' from an interest some years ago in very fast 'dynamic' soaring gliders but had not thought of it as a simple solution to avoid complex linkages to a V-tail and twin rudders on a slow model like the Invader.

## Achilles and the TwinAch....



Stuart with his "standard" Achilles – covered with Eze dope (no smells).



Chris poses with his "TwinAch". Built about 20 years ago it's modified with a twin tail and powered by a Telco CO2 motor. You can see his charging canister nestled under his arm!



And away she goes. Age hasn't diminished the performance of man or model.

## Gordons Bleriot



As usual, Gordon managed to tame the beast!!



Gordons Bleriot is unusual in that it's a conversion of a radio model to free flight. Based on a Tony Ray kit it flew really well.

## Flying wing prop noise

Paul Burling has been experimenting with a 600mm span Mini AR Wing.



The wing comes with the prop at the back



Paul has modified it to put the prop at the front. He reports on the effects.....

The wing is now more efficient as the thrust passes over the wings so it also has a very low stall speed compared to original

Sound measurements from 50cm away were -

- Original wing 87dB
- Modified wing 83dB

So what do these measurements mean? If the sound level intensity is doubled, the noise level increases by approx 3dB therefore the modified wing is half the noise level of the standard aircraft.

At a distance when flying you would find it difficult to hear any sound from the motor / propeller. It is now flying like a powered glider and sounds like one too. ROG will be next!!

## Glider guiders



Bruce and Clive bring an impressive array of catapult gliders to the Impington field on a Friday evening.

## Spitting fire!!

Chris Strachan gave Alan an e-flight UMX Spitfire (the micro size one) with the comment that it wouldn't fly. After binding to a transmitter the fault not only made it unflyable, but was not at all obvious to the casual observer.

The stabilisation system on the ailerons was reversed – instead of correcting any roll, it simply exaggerated it.

We tried to fly it but as Chris said it was impossible. The rudder and elevator were OK.



There was no electronic way of correcting this so it was back to basics. The control rod to the ailerons was removed and a new one made to connect to the other end of the aileron bellcrank. This effectively reversed the stabilisation and then all that was needed was to reverse the aileron direction on the transmitter. It now all worked correctly and flew perfectly!!

Despite its small size it really looked the part in the air. It's a bit odd that a good manufacturer like e-flight got something so basic completely wrong!!

## Real life FPV in Bangladesh

Mark Saunders was sent to Bangladesh on business to do some technical surveys for the Bangladesh Air Force. Mark reports:

As the country was in lockdown, with all commercial flights and public transport cancelled, the Air Force laid on helicopter transport for the 12 or so sites I had to visit. As well as being a huge timesaver, this also meant I could sleep in the same bed every night (apart from one night away in Chittagong). I also got a lot of FPV experience of most of Bangladesh. The BAF operate 2 helicopter types, Bell 212 (or Huey) and the bigger Russian MH17. For all trips apart from two, we had the same pilot, their Wing Commander Senior Instructor.





At this time of year, Bangladesh is generally waterlogged (half a meter of rain in August is the norm) There are also lots of storms about, and the helicopters have weather radars, and it was interesting to watch them dodge around the storms. We often flew down as low as 300 ft to stay below the cloud.



Its also part of the culture to have a little ceremony at the end of each visit, where they thank you for coming, and you thank them for having you, and you exchange little gifts – the favourites being a baseball cap, mug or face mask! I now have a lifetime supply of flying hats!



I must ask Mark for a hat – Ed.....

The BAF don't seem to ever throw anything away, and many of the air bases we visited had lots of junk aircraft dotted about, mainly Russian and Chinese types, either just dumped or being used as 'gate guards'. This Chinese Nanjang CJ-6 would make a good scale subject. I love the 1 piece flap under the fuselage.



To avoid compulsory quarantine locked up in a hotel room at Heathrow, Mark went to Iceland for 10 days holiday before returning to the UK.

## Little and Large



Did you know that there were 2 sizes of Pitts Specials? Well I didn't till I went to an airshow at Old Warden recently and these 2 did a spirited formation aerobatic display.

The Pitts Special first flew in 1944 and was the first choice steed for aerobatics till the advent of the Russian Yaks and the German Extra series.

## Future articles

If you have anything that might be of interest to our members, let the editor have it!!

## Radio installations – 1957 style

The interesting article below is from the 1957 Aeromodeller Plans Handbook courtesy of Chris Hinson who has kept it for over 60 years!!

One thing that has come back to haunt us is that heavy electric flight batteries will still move forwards in a crash!!

