

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

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

Lockdown and Model Flying

Well, our indoor flying has been severely constrained since Christmas as the Sports Centre has been closed. Hopefully some of us have had some outdoor flying where allowed.

The current situation is that we haven't got a clue what's likely to happen, but it's unlikely we will be flying indoors anytime soon. Please keep an eye on the [club website](#) for the latest information!!

You may have a wry smile at this, but Global Pandemic was No1 on the Governments Risk Register and they did b***er all preparation for that!! I wonder what they have done for Risks No2 and 3 – Flooding and Terrorism?

Indoor antics

Luckily I had snapped a few models and their pilots before the lockdown!!



Clives Beech Staggerwing flew well



Chris with his Invicta. Boxed pair below



Club Chairman John fits the nose on his Fike model E. He also displays some nifty PPE.

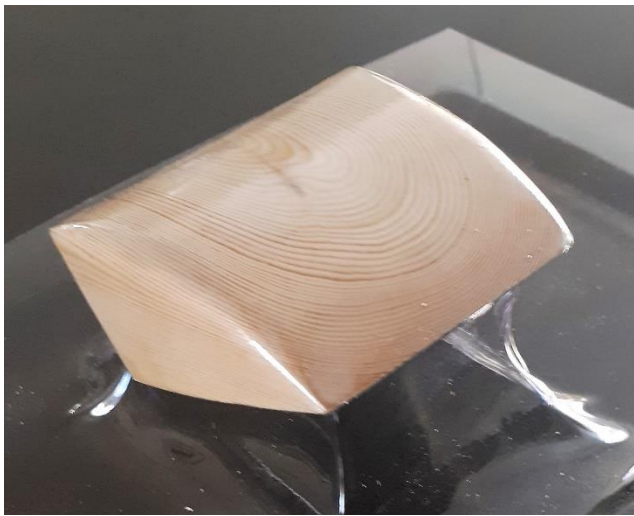


Marks Waco glider Canopy

Mark Saunders previously wrote a great article on moulding canopies – check out the website. Now he has put his efforts to further good use on his Waco canopy. He reports.....

To provide a canopy for the tow-release to stick out of, I was originally going to do a bit of acetate origami, but finally decided to have a go at vacuum moulding. This is a four stage process:

1. Build a vacuum moulder
2. Build a mould
3. Learn how to vacuum mould
4. Vacuum mould your canopy



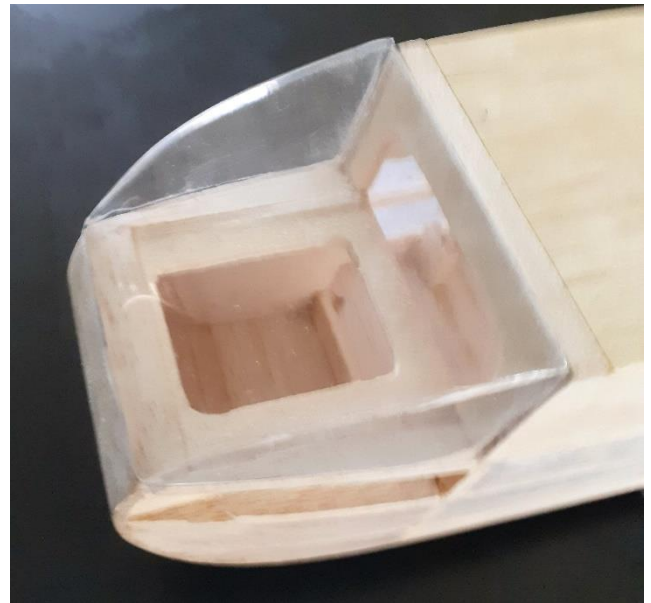
The canopy "on the mould"

There are 3 bits to the vacuum moulder –

- An oven (powered by a 1kW heating element, normally used to keep food warm in a cafeteria)
- A frame to hold the material (in my case an A4 size piece of 1mm acrylic), using bulldog clips
- The vacuum plate (a sealed box, with a perforated panel) which connects to my 'Shop-Vac' workshop vacuum cleaner.

The canopy is a very deep draw, so I had to elevate it off the plate to allow the material to stretch fully around it, and it took a few goes to get the temperature right. (Basically, when the material goes floppy and you think it's hot enough, give it another minute!).

The good news is that next time, I will only need to follow steps 2 and 4, which were the easy bits.



The completed Waco canopy on the model

FPV Aerobatics

I had been doing some FPV aerobatics with an analogue camera and video transmitter fitted to my well used e-flight Artizan plane and was enjoying it so much that I decided to fit the DJI digital FPV system on it.



For camera enthusiasts, Malcolm Bates took this photo of a low pass with his Canon 70D SLR and a 55-250mm STM lens. Because it was cloudy and dull the camera was set up in shutter priority 1/800th of a second to freeze the motion of the plane, with auto ISO and auto aperture. Mostly the camera chose an aperture of f5.6 and the ISO varied between 200 and 1000.

You can see the DJI camera fitted above the canopy as near to the CG as I could get it and the black painted area in front of the camera to stop glare. This is now a fantastic aspect of the hobby and is really almost like doing aerobatics in a full size plane – without the jeopardy!!

See a pilots eye video [here](#)



The Artizan flares for a rare "greaser". The red and white straw is an attempt to get the radio antenna into the best position for maximum RF propagation. One of the problems with FPV is that you tend to fly further away from yourself compared to line of sight flying and it is quite easy to get out of 2.4GHz radio range.

David Stophers Mustang



It has now been completed and is a really impressive stand off scale model. David is now waiting for the warm weather to test fly it. Probably not one for Impington!! The full build article is on our website [here](#).

Tandem winding?



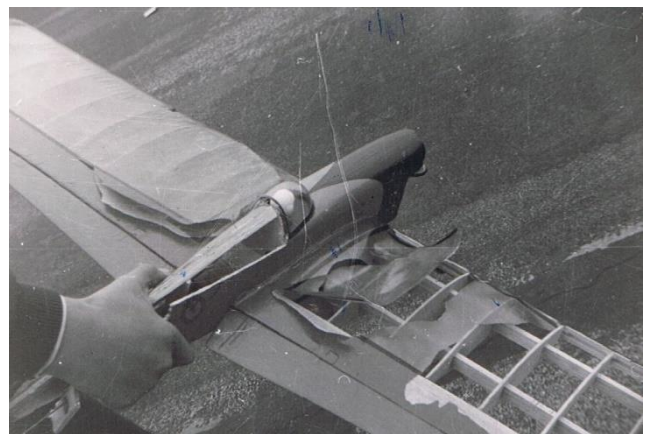
Roger and Bruce get their Pussycats ready

In their Youth



Who is this smart young chap posing with his motorbike outside his parents house in Milton in 1961? And what's the historic bike with a slightly aeronautical name?

Caption Competition



This model still exists and belongs to a long standing club member. Pictured after an incident many moons ago, can you come up with a suitable caption?

New "Article 16" rules

It may seem rather complicated, but here is a web [summary of the rules](#) and [the detail](#).

Answer to "in their youth"

The chap with the motorbike is our own John Copsey and the bike is an Aerial Leader 250cc. Sporting 16 HP and a top speed of 68 mph it eventually fell foul of Japanese imports and ceased production in 1965.

A tricky subject for a model – the Edgley Optica?



The Optica project began in 1974 with a company, Edgley Aircraft Limited, formed by John Edgley who, with a small team, designed and built the original prototype. In 1982, institutional investors bought into the project and set up a production line at Old Sarum Airfield in Wiltshire.

The aircraft has an unusual configuration with a fully glazed forward cabin, reminiscent of an helicopter, that provides 270° panoramic vision and almost vertical downward vision for the pilot and two passengers.

The aircraft has twin booms with twin rudders and a high-mounted tailplane. It is powered by a 160hp Lycoming flat-six normally-aspirated engine situated behind the cabin and driving a fixed pitch ducted fan. Due to the ducted fan, the aircraft is exceptionally quiet.

A total of 22 Opticas were manufactured, but the project never really gained much momentum.

Come on Chris, Gordon, Clive and others – can you make a rubber powered version!!