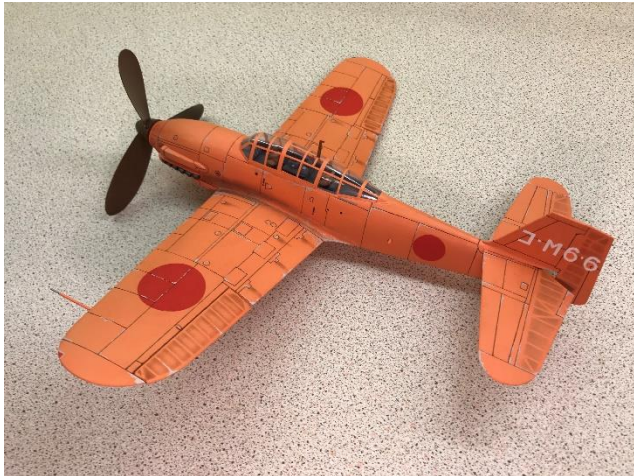

**Impington Model Aeroplane Club**  
 Founded in 1946 by Ray Malmström

edited by Alan Paul  
 alanpaul@outlook.com

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

## Masterpiece in miniature



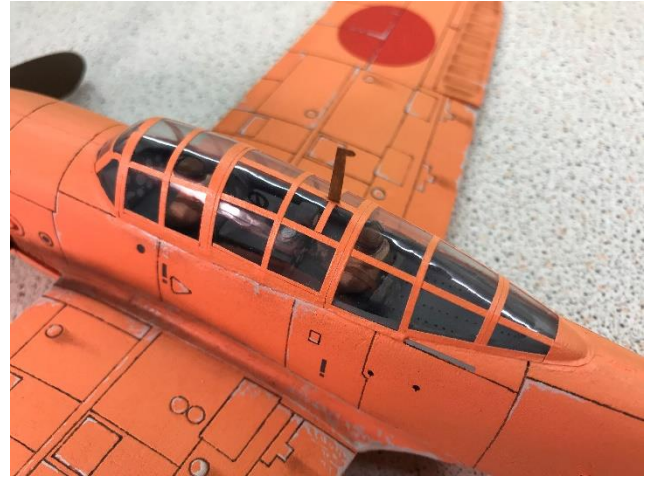
John Valiant will be competing at the indoor FF scale nationals this year and his latest masterpiece is an Aichi M6A1-K Nanzan



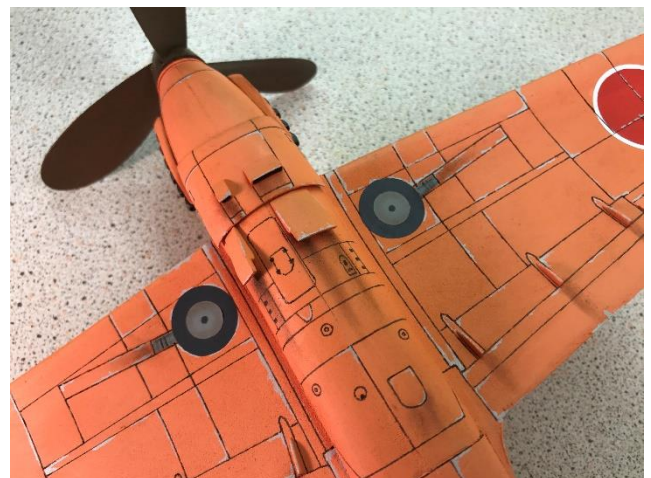
This picture shows the model sitting on top of the documentation that he had to supply for the scale judging part of the competition.



This shows the model with some of the templates used for the general shape of the very complex construction



The canopy was made with a balsa plug and pushed through a base shape hole in a ply sheet. The canopy frame was made by painting masking tape orange and then cutting out strips and shapes. 32 were used in total to copy the original plane.



The prop blades were cut from a plastic Pot Noodle tub. The rest of the model was made from blue foam with a few odd balsa parts for the spinner and nose plug. Hand painted with acrylics, the orange was mixed to match the colour swatch showing on the documentation.

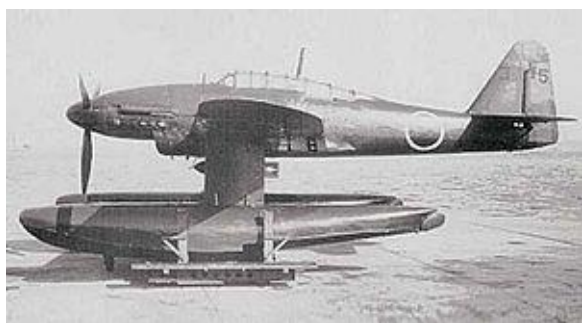
The insignia were created by painting condenser paper which is very thin with the appropriate colour acrylic paint and then a template is made and used to cut out the shapes including the lettering.

Good luck to John at the Nationals this year as he wasn't able to campaign his last creation due to Covid. Details of the full size overleaf.



The first prototype made its maiden flight in November 1943. Undergoing several improvements, the Aichi Aircraft Company received an order for limited production from the Navy in May 1944. Two preproduction airframes emerged with retractable landing gear for land based operation. These were to expedite flight testing and then later to be used as two-seat trainers.

They were given the name of Nanzan, and carried the designation of M6A1-K. The final version was called M6A Seiran and was to have large floats, folding wings and a folding upper section of the fin.



The Aichi M6A Seiran (Clear Sky Storm) was a submarine launched attack floatplane. It was intended to operate from I-400 class submarines whose original mission was to conduct aerial attacks against the United States. However the war ended before it could be put into action. On 16 August 1945, the flagship I-401 received a radio message from headquarters, informing them of Japan's surrender and ordering them to return to Japan. All six Seirans on board the two submarines, having been disguised for the operation as American planes in violation of the laws of war, were catapulted into the sea with their wings and stabilizers folded to prevent capture.

## John flies Eddies Kestrel



As reported in the last newsletter, John Copsey stole Eddies crashed Kestrel and it has now flown again successfully at Girton. Obviously good things come to those who wait like vultures for crash recoveries.....

## Playing with "Arduino"

Club boffin, Mark Saunders has been doing just that and writes -

Arduino is a family of low-cost, miniature 'micro controllers' which provide digital and analogue I/O (input/output) and a basic 16MHz processor. They are aimed at education and hobbyists, and are very cheap, have a lot of accessories available, and a wealth of published example software to do all sorts of things.



Arduino Uno – about £3.50!

From an RC modeller's point of view, the most interesting features are:

- Their small size, low cost and ability to run off battery power
  - Their ability to read and write 'pulse width modulated' servo control data
  - Their analogue inputs with analogue to digital converters which can be used to read all sorts of sensor data, plus measure battery voltages
  - Their ability to store data on an SD card to provide data logging
  - Availability of GPS and 6 axis 'MEMS' giro modules to read position, acceleration and attitude
  - Availability of telemetry transceiver modules to transmit data between Arduinos at up to 1km in 2.4GHz band
  - A video overlay generator which could be used to insert text and symbols into a video signal e.g. for a head up display.
- People have built complete auto-pilots, their own RC transmitters and receivers and all sorts of telemetry and data logging systems.

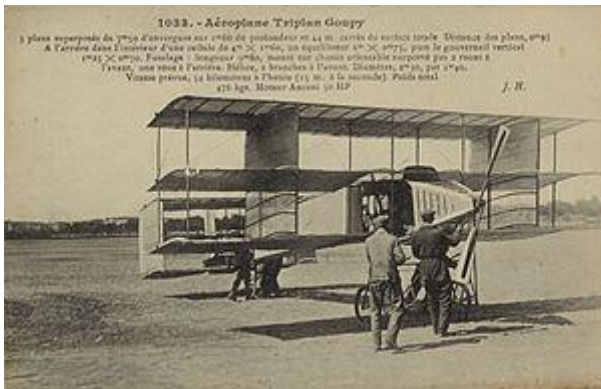
For Marks complete article click [here](#).

## Why build it Gordon?

Gordon Hannah has a vast stable of eccentric models and writes the first of a series of articles here.

Your editor set me thinking when I told him about my current project – more about this at some future date. He pointed out that I have a stable of rather odd models, commenting on how well they flew – he hasn't seen the failures obviously.

So here is an example with a bit of background as to the why and wherefore.



The Goupy of 1908.

Goupy (I don't know his first name) started in aviation by having two triplanes constructed by Voisin who was in the forefront of French aviation at the time and his designs for Goupy were based on his earlier efforts. By 1908 Voisin's biplanes were quite successful so Goupy was sensible in getting him involved.

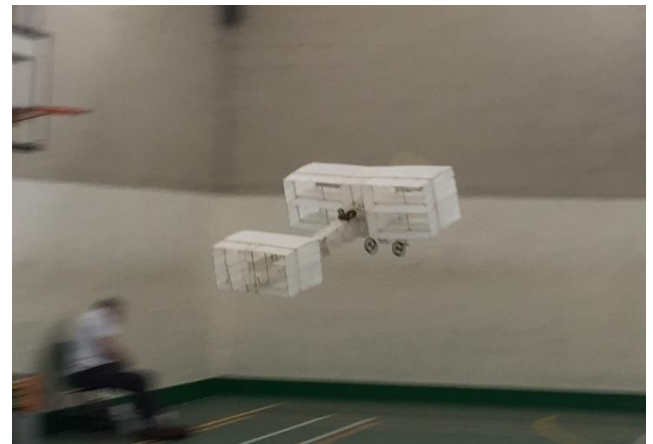
The result was an interesting triplane with a biplane tail and an elevator between the rear planes. With 'side curtains' it was effectively a box kite which gave it significant stability. Nevertheless, and unsurprisingly, the machine varied with continual amendments from flight to flight, particularly with the side 'curtains'. Hence it is difficult to get true scale data of any of the variants.



I came across a plan in Sams Models collection of a peanut scale model, which caught my eye and went on my wish list. This was a design thoroughly worked out by a German, Benno Sabel and appeared in an American Model Builder magazine in 1985.

I suppose I have always liked the rigging side of old aircraft – I have had a hankering to build a galleon, but they don't fly and only gather dust. As a result early aircraft with lots of rigging have an appeal, and the Goupy fills this requirement.

So armed with lots of 1/32nd and 1/20th square balsa I set to. Rigging is fine cotton and nylon thread. The wheels are homemade spoked ones (another article?) and the covering is jap tissue undoped.



The end result – with quite a few expletives – is shown above. Most satisfyingly it flew almost straight off the board – just a little nose weight – and is still flying after several years. So there you have it - Gordon Hannah.

## Important Dates!!

Our first Public Open Day for 2 years is on Sunday 3<sup>rd</sup> April – see website for details. Help for setting up and raffle prizes welcome at 4.30pm Saturday 2<sup>nd</sup>.

The last Thursday indoor session is on 7<sup>th</sup> April and we start outdoor flying on the field the following day, Friday 8<sup>th</sup> April.

Please note that we have booked the field from 7pm every Friday and although it is OK to come earlier if the weather is fine, we can't really throw any other users off the field till 7pm.

Also make a diary note for the BMFA world record attempt on Sunday 15<sup>th</sup> May.



## Future CL World Champion

The Control Line (F2) World Championships are held every 2 years and countries across the world send teams to contest the various disciplines such as Speed (F2A), Aerobatics (F2B), Team Racing (F2C) and Combat (F2D).

The event should have been held in 2021 but was cancelled due to Covid so they are being held this year in Wloclawek near Warsaw in Poland.



As previously reported our own member Gary Church has bagged the 3rd and final place.



The models have to be able to be taken apart (up to 6 pieces) and must pass rigorous inspection by FAI scrutineers.

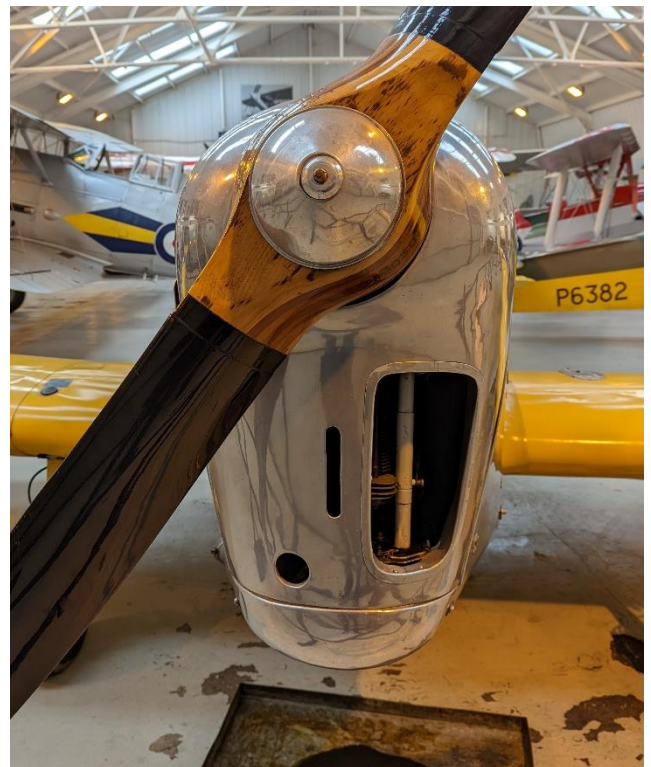
Whilst the team does get some BMFA support, it nowhere near covers the cost of main and reserve models at up to £3,000 each, or the travel and accommodation, so we are having a fund raiser for Gary – any donations please to John Copsey at club evenings or by bank transfer to him via 60-18-17 account No 17642299

## The 5 gram ME109



This is Bruce's latest creation from the plan in Aeromodeller. A very lightweight construction weighing just over 5 grams and covered in tissue that's been printed on his inkjet printer.

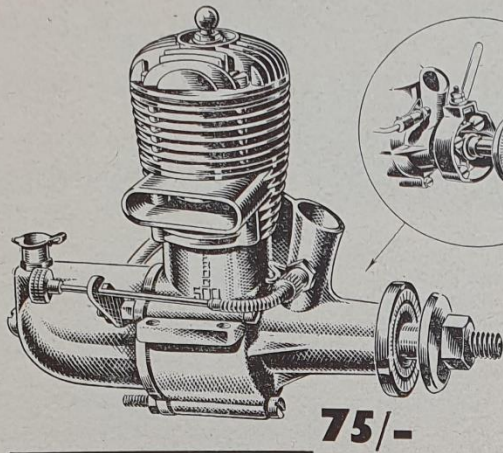
## What's this intake then?



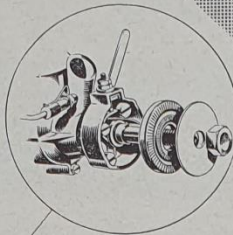
It's still not a Chipmunk - answer below.....

It's a Miles Magister photographed at Old Warden's Shuttleworth collection





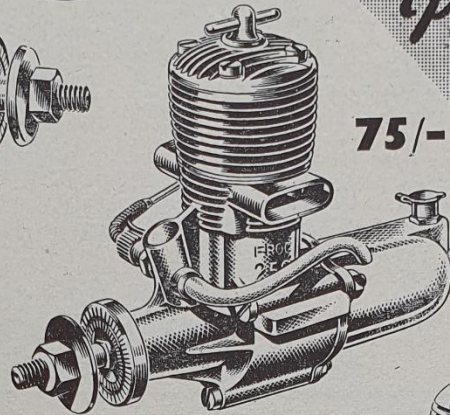
The world's most famous 5 c.c. glow motor—leader in reliability, power and low initial cost! The "500" is 4.92 c.c. capacity, weighs 7 $\frac{3}{4}$  oz., and has a speed range of 4,000 to 15,000 r.p.m. A spark ignition version is also available at 85/-



# FROG



*Power Plus  
Motors*



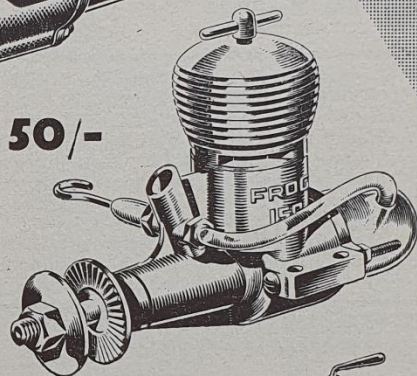
75/-

## ★ FROG ★ SUPER FUELS

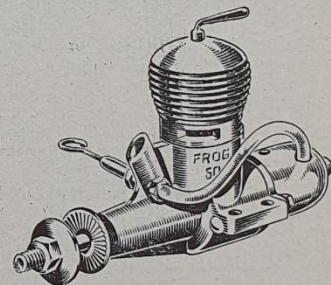
Frog "Powa-Mix" for all Diesel Engines. Ready mixed. Contains ether. Blended by Shell Mex and B.P. Ltd. Tins with spout 2/6. Frog "Red-Glow" Fuel. For all Glow Plug Ignition motors. Shell Mex, B.P. Blend. 2/6 per tin

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8 in. " × 6 in. "	1/3 "
8 in. " × 8 in. "	1/6 "
10 in. " × 6 in. "	1/6 "
9 in. " × 6 in. "	1/6 "
6 in. " × 4 in. "	9d. "

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	100% increase in strength, 20% saving in weight.
8 in. dia. × 5 in. Pitch	2/11 each
8 in. " × 6 in. "	2/11 "
8 in. " × 8 in. "	3/6 "
10 in. " × 6 in. "	3/6 "
9 in. " × 6 in. "	3/6 "
6 in. " × 4 in. "	1/6 "

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