

# HALE HALL MODEL CLUB NEWSLETTER

## JANUARY 2023



Club website link - <https://hhmac.bmfa.org/>

Hale Hall YouTube channel - [HH YouTube](#)

Welcome to the January newsletter. Happy new year!! This month we have an update on the BMFA world record attempt, a report on our mince pie meet, a long term build and last months crossword answers. Finally, a few dates for your diary.

### Mince pie meet

The weather between Christmas and the New year was poor so we had to wait until Monday 2<sup>nd</sup> January for our mince pie meet. It turned out to be a good choice as we were blessed with a beautiful sunny, almost warm winter day. During the day a total of 19 members turned up to enjoy soup, a table full of goodies to eat and plenty of flying. In previous years we all sheltered in the hut keeping out of the cold, with only the odd brave soul venturing out to fly. This year was a complete contrast with lots of flying and an almost empty hut! Thanks to 'Souper' Chairman Jack for warming up the 8 tins of Heinz tomato soup (a task that requires great skill – Jack told me). let us hope that we can arrange similar good weather for the rest of our events this year!



Heinz soup – only the best for our members!!



'Souper' Chairman was on heating duty.



Lots of calories!!





The happy band - full of soup and mince pies!

## BMFA world record attempt

The BMFA recently hosted an 'In the Air Tonight' webinar to give an update on the world record attempt last year and the plans for 2023.

As our national governing body the BMFA are custodians of all UK records relating to model aircraft. The BMFA have registered the 2022 achievement (3019 aircraft in the air at the same time) as a UK record and a world record. We also received a commendation from the FAI for the achievement. Apparently this was significant as the FAI do not issue commendations regularly. A Guinness world record was not pursued due to the problems of verification.



For 2023 the BMFA are planning to hold the mass launch again with the objective of beating the 3109 achieved last year. This will take place on Sunday 14<sup>th</sup> May at 12:00.

Flushed with the success of the mass launch record attempt the BMFA have come up with another challenge for us. Titled 'Fly around the world in eight hours', the idea is to for clubs to collectively fly more than 24,901 miles (the circumference of the earth) in eight hours during a nine-day period from 1<sup>st</sup> July – 9<sup>th</sup> July. The time window has been added to cope with poor weather, the eight hours can be split into smaller slots if required.

There is no prescribed method for measuring the distance travelled, GPS can be used but the simplest method is to use a pylon course of a known length. Fly around the course, count the laps and calculate the total distance travelled. The BMFA have suggested organising sponsorship for a nominated charity.

We plan to take part in both events, watch this space for more information.

## Faster than a speeding Bullet?

This is the story of a project that has taken me nearly 50 years, and is still not finished. 2023 arrived and it was time for another New Year's resolution. What should I strive to achieve this year? My B certificate, go flying more often or finish my Crescent Bullet. Well, I will try for my B certificate, but I have decided 2023 is the year that the Bullet will finally make it into the air. This will hopefully stop some of our members (you know who you are!) ribbing me for my lack of progress.

The story starts way back in the mid 1970s when trousers were flared, hair was long (or you had some !), bathroom suites were avocado and political correctness hadn't been invented. I had learnt to fly with a 3 channel MFA Yamamoto powered by an OS 35 and controlled with a home built Micron PL6D radio. After going solo I progressed to a Pilot models high wing aileron model and a Futaba 6M radio. The time had come for my first low winger and the choice was obvious, a Crescent Bullet, smaller brother of the Tornado. So many times, I had visited the local model shop (remember those!) and drooled over the brightly coloured box with the resplendent red Bullet on the lid. I was seduced by the sleek lines and the promise of unlimited aerobatics. The day finally came when I had earned enough from my after-school lab assistant job to buy my dream model. Off we went in my dad's car (the box was too big for my motorbike!). With great excitement I rushed into the shop, luckily the Bullet was still on the shelf. £25.92 (!!!) was handed over and I was the proud owner of a Crescent Bullet, life was good.



The original box, over 45 years old! (Quick assembly – maybe not!!)





£25.92!!!

Unfortunately I didn't have the funds to buy the OS 40FSR, new receiver and servos required to complete the build so progress was limited to a small amount of work on the fuselage sides. At this point life got in the way and instigated the first halt in the build process. University, first job, moving 'up North' and marriage all contributed to the Bullet being put on the back burner. I was still flying but not much building was happening. In 1983 I inherited a Bullet from my dad, it flew beautifully and served me well for many years. It finally succumbed to the old enemy of glow fuel soaking. Meanwhile my Bullet was banished, unloved to the loft and left to gather dust. Occasionally I would open the box, only to close it again and move on to my next craze. Models came and went; my daughters grew up and finally I had more time for some building. Fast forward to 2013 and the box was opened again, this time a spark of nostalgia prompted me to dust it off and bring it downstairs.

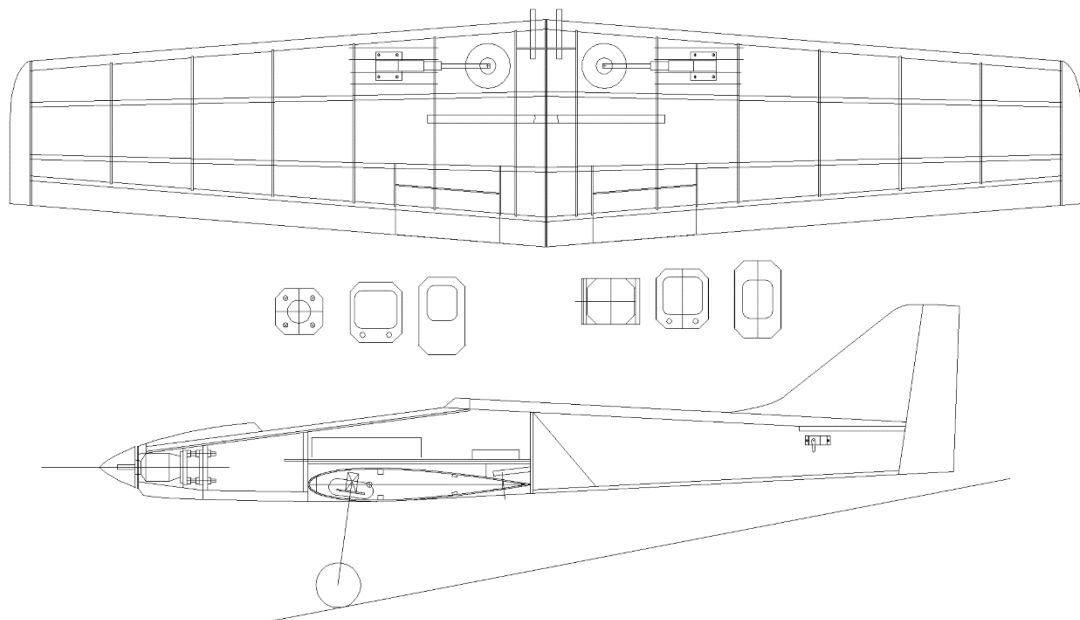
After a brief inspection it was clear that the veneered foam wings were past their best. The veneer was cracked and lifting and would be difficult to repair, a new wing was required. I was close to closing the box, but it was the Bullet's lucky day as I needed a project for my latest fad.

I had recently acquired some wing design software, a cnc router and I had also been using a laser cutter at FabLab Manchester. FabLab was an initiative started by MIT in America to encourage people to create start-up businesses using the latest technology. They set up a few centres across the country, the nearest one being in Manchester. They had a range of equipment including an 8ft \* 4ft cnc router, a cnc vinyl cutter and a 90cm \* 60cm laser cutter. Everything was free to use and tuition was provided. I had been using the laser for cutting out indoor models from Depron. FabLab still seems to be in business but the Manchester site is closed and machine hire is not free anymore.

I decided to use my new toys to produce an updated version of the classic Bullet. I settled on a conventional built-up wing with airbrakes/flaps, the original was very slippery on the approach and the airbrakes/flaps would help reduce landing speeds. Next modification was to fit electric retracts. I had some spare retracts from Hobby King which would allow an even sleeker profile than the original fixed tricycle undercarriage. To make the build easier I planned to convert the undercarriage to a tail dragger. Following the 'make it sleeker approach' I went for an electric powertrain using a brushless motor and a 4 cell lipo.

I started with the wing design using a software package called Winfoil. This allows you to define the wing shape, wing section, add spars, wing sheeting and servo supports. I increased the wing span

slightly and chose a NACA 15% symmetrical section, a good all-rounder for an aerobatic model. The software didn't have the facility to add bearers for the retracts so I exported a plan and a set of wing ribs in AutoCAD format to complete the design. This was the most difficult part of the process and involved creating a scale drawing of the retract units so that I could get all the angles correct. After much head scratching, I finally came up with a plan I was happy with. I also added the inboard flaps / airbrakes. Encouraged by the success I then produced a modified fuselage design to include a mount for the electric motor, a front air intake, a large hatch and tray for the battery and an attachment point for a tail wheel. These were all exported in a vector PDF format and taken to FabLab to be cut using their laser cutter.

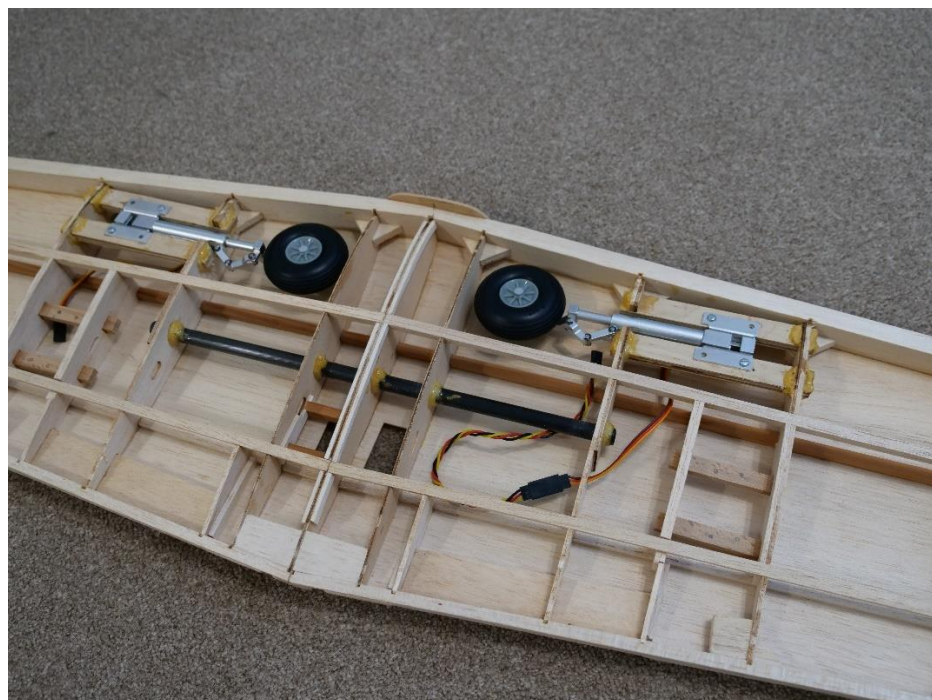
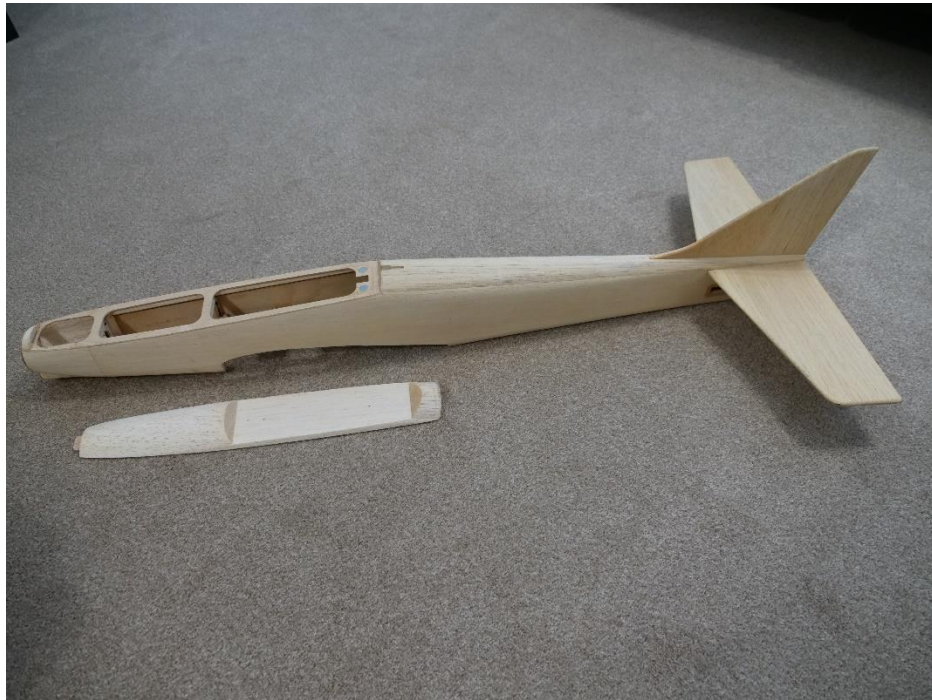


The final plan

After a few visits to FabLab all the components were cut and it was time to start the build. Initial progress was swift, the fuselage design is old school with lots of block balsa being used to get the streamlined shape. A few hours with a razor plane produced a satisfying pile of balsa shavings and a finished fuselage. The main structure of the wing went together quickly and it was time to attach the balsa wing sheeting and create wells for the undercarriage. The wheel wells turned out to be particularly tricky so the build was halted again waiting for some inspiration. The Bullet was now vulnerable to other distractions, and you guessed it, another project took priority and the Bullet was banished to the loft again.

Another 10 years flashed by and the Bullet finally came back to the top of the 'to do' list in January. Luckily, I had painted the fuselage with Deluxe Materials Eze-Coat (a water based epoxy alternative) so that had survived unscathed. The wing was not so good with some broken ribs and damage to the wing skins. At least there were no signs of woodworm! A few days work was required to get back to square one before the project could begin to make progress. The wheel wells are now complete and the wing servo installation is in progress. Will I manage to complete the Bullet this time? Who knows? If you see me at the field please ask about the Bullet, it may help me to finally finish this long-term build.

Maybe you can you beat it? What is your longest project? let me know.



## Did you Know?

The original Bullet was manufactured by Crescent models, starting in the 1970s. PB models have been producing kits of the Bullet and the Tornado for many years, you can still buy one from Cloud Models. Ripmax produced a slightly enlarged (58 in span) ARTF version in the 2000s (I think). They fly very well; I had the chance to fly one when we went to the RC hotel in Corfu. I think the model has been discontinued as it is not on the Ripmax website.





Tornado



Bullet



Ripmax Bullet

## Crossword answers

Did you have a go? Please let me know if you would like another.

Here are the answers:

Griffon	Engine in the MK24 Spitfire
Buckminster	BMFA headquarters
Avro	Aircraft company that made the Anson
Futaba	Japanese radio manufacturer
Chris	Wott Cristian name
Keilkraft	Ace model kit manufacturer (The Ace was a rubber powered free flight design)
Duxford	Home of the fighter collection
Shuttleworth	home of the Blackburn B-2
Zero	fighter aircraft by Mitsubishi
Fuselage	aircraft body
Rudder	yaw control
Mosquito	The wooden wonder
Caprice	Keil kraft glider
Boddington	Designer of the Tyro major



## What's on

### Hale Hall Events

The club have the following events planned this year; exact dates may be weather dependent!

**Show and Tell evening** - late March/early April - Venue tbd.

**Training day 1** - Late April / Early May

**BMFA World Record Event** – Sunday 14<sup>th</sup> May

**Scale day (Civilian / Military )** – Early June

**Summer solstice** – 21st – 23rd June.

**BMFA Around the World in 8 hrs** – 1<sup>st</sup> – 9<sup>th</sup> July

**Training day 2** - Late August / Early September

**Mince pie meet** – late December

Other events for your diary. More will be added as they are announced.

Sadly, the LMA event at Cosford has not been approved by the RAF. The LMA are currently looking for another venue nearby.

Model show – Cosford – Model mania – 30th April – 1st May

Full Size - Shuttleworth - Season Premiere, King and Country Air Show Sunday - 7<sup>th</sup> May

Full Size – Duxford – Flying day – VE day - Sunday 7<sup>th</sup> May

Full Size - Shuttleworth - Evening Air Show, Special Operations - Sunday 20<sup>th</sup> May

Full Size - Shuttleworth - Around the World Air Show - Sunday 4<sup>th</sup> June

Full Size – Duxford – Flying day – Commemorating D Day - Sunday 4<sup>th</sup> June

Full Size – Cosford Air Show – Sunday 11<sup>th</sup> June

Model show - Weston Park. - 16th – 18th June.

Full Size - Shuttleworth – Evening, Best of British Air Show - Saturday 17<sup>th</sup> June.

Full Size – Duxford – Summer Air Show – 24<sup>th</sup>, 25<sup>th</sup> June

Full Size - Shuttleworth – Military Air Show - Sunday 2<sup>nd</sup> July

Full Size - Shuttleworth - Evening, Summer Picnic - Saturday 15<sup>th</sup> July

Full Size – RIAT – Fairford - 14, 15, 16<sup>th</sup> July.

Model show – Beer & Warbirds – Buckminster 14<sup>th</sup> – 16<sup>th</sup> July.

Full Size – Duxford – Flying Days – The Americans - Friday 28<sup>th</sup> July

Full Size - Shuttleworth – Carnival Air Show - Sunday 6<sup>th</sup> August.

Full Size – Duxford – Flying Days – 19 Squadron - Saturday 12<sup>th</sup> August

Full Size – Blackpool air show – 12, 13<sup>th</sup> August

Model show – LMA - Elvington 12<sup>th</sup>, 13<sup>th</sup> August.

Full Size - Shuttleworth – Flying Proms - Saturday 19<sup>th</sup> August.

Full Size – Duxford – Flying evening – 26<sup>th</sup> August.

Model Show – British Nationals - Barkston 25, 26, 27, 28<sup>th</sup> August. (Who knows !!)

Full Size – Southport Air Show – 2<sup>nd</sup>, 3<sup>rd</sup> September

Model Show - LMA – Much Marcle - 2<sup>nd</sup>, 3<sup>rd</sup> September.

Full Size - Shuttleworth – Bedfordshire vintage Air Show Sunday 3<sup>rd</sup> September.

Full Size – Duxford – Battle of Britain Air Show – 16<sup>th</sup>, 17<sup>th</sup> September

Full Size - Shuttleworth – Wings and Wheels Show Sunday - 1<sup>st</sup> October.

Full Size – Duxford – Flying Finale - Saturday 14<sup>th</sup> October

## Parting shot

So that is the end of another newsletter, I hope you found it interesting. For future newsletters I would like to include as many of your projects and especially first flights as possible. So please document the occasion with a few photos or contact me and I will try to come down with my camera. I do have some ideas for future articles, but the success of the newsletter will only continue if you, the members, provide me with some copy. Anything aircraft related will be more than welcome, days out, trips, build logs, full size or something for the Curiosity Corner.

Don't be shy; if you don't fancy writing a full article, just send me a few notes and I will do the rest.

If you have any suggestions on subjects to be included in the Newsletter, drop me a line.

In these days of data protection we need to ask members if they have any objection to be included, either by name or photograph, in the Newsletter. If you do not wish to be in the Newsletter please let me know.

Cheers,

Andy Holden.

You can contact me at [andy.holden56@btinternet.com](mailto:andy.holden56@btinternet.com)