

# HALE HALL MODEL CLUB NEWSLETTER



## DECEMBER 2021



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

Welcome to the December newsletter. I have now moved, but we are still surrounded by boxes so another short newsletter. I hope you enjoyed the Christmas celebrations and Santa delivered lots big boys toys! This month we have the arrival of our container, an article on canopy moulding and some club information. Wishing you and your families a happy and safe 2022, let's hope Covid goes away and we will have some good flying weather.

## For Sale

John Murdy has some planes for sale, see the link below:

[John Murdy planes for sale](#)

## WhatsApp group

For those new to the club we have two WhatsApp groups, one for flying at Hale Hall and one for slope soaring. We use them to let members know who will be at the field or at the slopes. If you would like to be a member please contact chairman Jack at [jack.lumley@gmx.co.uk](mailto:jack.lumley@gmx.co.uk) If you are already a member please use them if you can.

## AGM

We had our first AGM for 2 years on Thursday 2<sup>nd</sup> December. Turnout was disappointing, maybe because of Covid, but enough members were present to achieve a quorum. Reports were presented by the committee; several updates to the constitution and committee roles were proposed and voted on. Dave Ringland has sent out a detailed set of minutes if you want to know the full story.

## BMFA achievement schemes

The committee are keen to increase the number of club members that have obtained one of the BMFA achievement schemes. We are planning to hold some events in 2022 to give members the opportunity to take the test which include a flying test and compulsory questions. A set of sample questions have been created to help in the process. These are now on the club website at the following link:

[BMFA-Test-Questions-Answers-Issue-3](#)

## The container has landed

After much deliberation and at a considerable expense to the club, our container arrived on site on Monday 6<sup>th</sup> December. We were expecting the delivery around lunchtime, but Andrew O'Neill received a phone call in the morning saying they would be onsite around 10:00 am! That led to a flurry of phone calls to make sure someone was available on site. The lorry arrived just after 10:00 and carefully negotiated the rather muddy track onto the car park. The weather was awful, cold and raining but that didn't seem to bother the driver! After removing a few chains he skilfully lifted the container onto the base we had prepared. The excellent work preparing and levelling the paving slab was worth the effort as the container was exactly level which allowed the doors to open and close perfectly.











The Mower's first visit to its new home.

Since it has been delivered Andrew O'Neill and his team of helpers have started to fit out the container with some shelving and a workbench. The plan for the old mower hut is to move it into the gap between the hut and the container; it will then be used to store the spare chairs etc.

## Mince pie meet.

As promised at the AGM the mince pie meet was arranged for the Christmas / New Year week. The weather during the week was decidedly inclement, but we eventually decided on Friday 31<sup>st</sup> December as it was at least forecast to be dry. Preparations were made for the huge influx of members expected; well Jack bought three tins of soup! On the day the weather wasn't too bad and a select band of members turned up to partake in mince pies, Bakewell tarts, chocolates and of course the traditional soup. Nobody was brave enough to fly but we spent a pleasant hour or two putting the world to rights. Barry Marshall showed us his enormous 3D printed Eagle which he hopes to fly soon. He promised me he would give me some details for a future article.



The select few!

## Breaking the mould

John Murdy has been learning the art of canopy moulding. Over to John.

*Back in early August I had the misfortune of my Zlin 50 canopy transparency becoming detached in flight and breaking up during the process. The aircraft was landed successfully and put away for the day as its flying characteristics without the transparency were not good.*



*On getting home I trawled the internet for a Black Horse Zlin 50 transparency but the best I could find was an equivalent for a Seagull model. I decided to order this from Elite Models, however, various delivery dates went by until in late November I was told it may not come in until the new year. I decided that this approach was not an option so cancelled the order and decided to manufacture my own.*

*Again, back to the internet to get some ideas on how to go about manufacturing a new canopy transparency. The first issue I came across was the size of the transparency at 300mm long, 150mm wide and 110mm in depth the transparency was too big for the shrinking of a plastic bottle technique. This left me with the only viable option of using a mould and a stretching frame.*

*So, I set too by taking some dimensions off the canopy frame and drew up a plan and side view from which I was able to construct a 3D skeleton frame. I then blocked out the skeleton frame with off cuts of balsa which I then planed/sanded back to obtain the correct shape and profile. The final task was to fill in the gaps and blemishes using leftover Polyfiller (left over from DIY), the end product looked fit for purpose.*



*The next phase was to manufacture the stretching frame. Here I decided to use 15mm square softwood (B&Q special) and constructed two frames which were then used to sandwich the acrylic and locked together with drywall screws (leftovers from another DIY job).*



*I procured two sheets of A3 size acrylic of 1mm thickness and sandwiched the first sheet in the frame and trimmed to size. So, all was now set to use the mould and frame to stretch the acrylic. I decided the best way to do this was to commandeer the largest oven in the kitchen. I set the temperature to 190°C and allowed the oven to heat up to temperature. Having read various articles on the subject I elected to heat the acrylic for 11/2 minutes. On removing the acrylic from the oven, I quickly pressed the frame/acrylic over the mould and held until the acrylic started to harden.*

*Hmm..... the first thing I noticed was that the acrylic had stuck to the mould, a gentle tap soon released it. So, what was the outcome, well on the positive side the shape and profile of the transparency look good. However, there were a number of issues;*

*The heat of the acrylic had caused the resin in the balsa leach out and stuck the transparency to the mould. This left an imprint of the wood grain on the transparency.*

*The stretching frame was set too wide and allowed the acrylic to flair out from the mould at the sides.*

*There was also an inconsistency of acrylic thickness which was partly due to not siting the mould central to the frame and inconsistent pressure.*

*A real plus from this first attempt though was that the areas where the Polyfiller had been used the transparency was crystal clear. So back to the drawing board.*

*The first task was to provide the mould with a hard coat of Polyfiller this took a few coats to complete and I finished the surface by polishing with 1200 grade sandpaper.*



*The next task was to reduce the width of the frame, for this I decided to give the frame a 20mm clearance around the mould hoping to minimise the chance of flaring. With these improvements I committed to a second attempt. Again, I used the same temperature and time as before and once removed from the oven I centralised the mould within the frame and with a consistent pressure whilst moulding and I kept the pressure applied until the acrylic had hardened.*



*Well, the outcome could not have been better, the transparency was crystal clear with very little flaring at the side. The acrylic thickness was also more consistent than my first attempt.*



*I decided that this attempt was of sufficient quality for the repair, so I trimmed the transparency to fit the airframe and tidied up the edges with Oracover. The end result was very satisfying.*



That looks a really professional job John, you may have some customers coming your way!

## 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)