No 106 2021

HALE HALL MODEL CLUB NEWSLETTER

January 2021

Happy New Year and welcome to the first newsletter of 2021 and my first newsletter as editor. A slightly daunting job, I hope I can keep up the excellent standard that Kev Adamson and previous editors have produced.

I do enjoy taking a few photos, so if you see someone looking like this lurking around the field, it is me – not the paparazzi.

Up first a few words from our illustrious chairman Jack.

Chairman's chat

As this is the first newsletter of the year, I would like to welcome you all to another year in the history of Hale Hall Model Aircraft Club. Let's hope for a better year than the last one, with a bit of luck (and lots of vaccine!) we may even manage a few events when the virus situation improves. Maybe even a Mince Pie Meet in July, who knows? In the meantime, try to document all your 'lockdown projects' for inclusion in future issues.

Any of you who read the AGM notes will already know that we have a new Newsletter and Website Editor in Andy Holden. I'd like to welcome Andy to his new role and wish him luck in extracting articles from the membership. I'd also like to thank Kev Adamson for his sterling work as our previous Newsletter Editor. Although Kev's illness meant he had to relinquish the Editor's role, he remains a member and I'm sure you will still see his trusty SLR pointed your way during the year. Andy is also a keen photographer so expect to see lots of photos in forthcoming issues.

The club is run by the committee for the benefit of all our members. If you have any comments, positive or negative, please get in touch as soon as any issue arises. We can't fix everything but we will listen and fix what we can.

Let's hope for good weather once restrictions are eased, and we can get some wear on those transmitter sticks!

Gang of Three

You may have noticed a set of three gang mowers have recently appeared at the Hale Hall Site. They were previously owned by the Chingle Model Club, the sad closing of the club recently has resulted in them looking for a new home. As many of the Chingle Members have joined Hale Hall they were kindly donated to us, as long as we collected them from their flying site.

So on a cold and damp December day the mowers were loaded into the back of Andrew O'Neill's van and transported to Hale Hall. Some surgery was required to make them fit in the van, but it only required a few bolts to be removed. Neil Skinner made short work of them with his portable disc grinder.

I think we will have to wait until the ground is firmer to use them, when the grass is dry they are capable of creating an excellent finish. The initial plan is to use them to cut the outfield, which they could probably do in 20 minutes. They will need a little TLC and a car / 4 wheel drive to pull them, I don't think our ride on mower will be up to the job. Watch this space!

Neil Skinner attacking the bolts - no contest!

In the Van, luckily no hernias!

Socially distanced gang of three

Winter Projects

This time of year is traditionally used to build new projects to enjoy in the warmer days of summer. In these Covid times I know that has been going on all year for some of us!

Ron Ingram and Bob Welton both have 'builds on the board' and have kindly shared their progress.

Ron has always been a fan of large models and his two current builds are certainly large. I had been told that the current balsa shortage was caused by the Chinese using it for full size wind turbines, but it looks like Ron has had a hand in it as well! He tells me his model room is only 8 ft by 6 ft so building such large models must be a challenge.

Beech 18.

Ron has chosen the Beech D18 civilian version from a Zioroli plan, which I recall him bringing to one of our show and tell evenings (remember them!)

- Scale: 1/5
- Wingspan: 114"
- Length: 80"
- Wing Area: 1950 sq/in
- Weight: 38-45lbs
- Power: 38cc-50cc gas

Some details of the build from Ron:

The plan is from the well-respected RC aircraft designer Nick Zioroli in the USA. Their plans use traditional Balsa and Ply construction. They have a large range of plans and scale accessories.
I bought an alloy tube spar kit (2 tube spars), dummy engines, cowls, canopy, side windows, ABS nose and tail cone.

A laser cut wood kit was purchased from Leon at Belair in the UK. The kits are good quality and contain everything that has a shape. You have to buy additional balsa and ply sheet materials, YOU NEED A LOT OF BALSA.

I decided not to fit flaps which are an option on the plans. The beech has plenty of wing area and it saves the weight of 4 servos and the additional structure.

I have fitted Robart electric retracts (mains and tail) with functional oleo suspension. OK but very expensive. Most of the Ziroli's designs are for petrol engines. As I only fly electric I have had to make some modifications. Power will be a pair of Hobbyking Rotomax 50cc equivalent brushless motors powered by 2 x 5000 5 cell batteries (10 cell setup on each motor) with 180 amp YEP Opto engine controllers

Note milk bottle for scale!

As you can see from the photos below Ron has made good progress since he started early in 2020.

Ryan Spirit of St Louis

Ron is also building a Ryan Spirit of St Louis. This one was only started just before Christmas, so good progress so far.

- scale: 1/4
- Wingspan: 138"
- Length: 86"
- Wing Area: 2460 sq/in
- Weight: 32-38lbs
- Power: 62cc-85cc gas

Another Nick Zioroli design. Ryan Spirit of St Louis was flown by Lindbergh on the world's first Trans-Atlantic solo flight. The detailed plan set consists of four large sheets which clearly illustrate all structure as well as the unique wing strut and landing gear installation (steel tube with working oleos, which I bought from Robart) It was expensive. The wing is designed as a two piece assembly to ease transportation. Both Wing panels are 63 inch span and 21 inch chord, it's a big wing!

After all the balsa sheeting on the Beech 18, I wanted something simpler. The two piece wing is flat bottom parallel chord Clarke Y section. Only small ailerons so Nick recommends coupling ailerons and rudder.
Fuse made from spruce and ply, Balsa ribs, leading edge and wing tip, but everything else in the wing is spruce/pine and ply. I got a Titan bench thicknesser for Christmas so I have cut a lot of spruce parts myself.
Covering will be Oracover fabric, 10 meters required. 1/4 scale full pilot is on the way from Zioroli. Special alloy spinner is due any day now.

Two very impressive projects Ron, I am looking forward to reporting on the first flights!

Did you know? Charles Lindbergh became the first person to fly across the Atlantic on a solo, nonstop trip in 1927. His plane, the Spirit of St. Louis, took off in New York on 10 May and landed in Paris less than 34 hours later. Lindbergh was 25 years old when he crossed the Atlantic.

SE5A

We all know that Bob Welton has a penchant for old biplanes; to continue the theme his next project is a Flair SE5a. Over to you Bob.

When I heard that Kev Adamson was selling his unstarted Flair SE5a kit last summer I jumped at the chance to buy it. Winter projects, in my opinion, don't come any better than a Flair kit of some sort. The parts assemble with remarkable accuracy and the kits are so comprehensive that, other than your choice of covering, engine and a few additional parts, very few extra items are required. This SE5a will be the third Flair kit that I've built. The second kit I built was the Bristol Fighter F2b, with which I have a love/hate relationship, as many of you will know. My first Flair build was, would you believe, another SE5a, which I sold once the airframe was complete in order to purchase the F2b - why you may well ask? Well that's another story for another time.

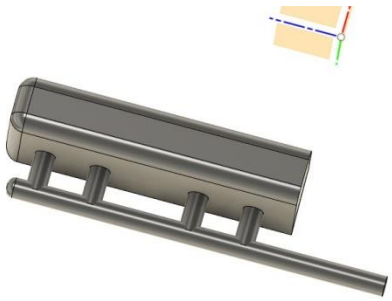
About the SE5a.
The Scout Experimental 5a, along with the Sopwith Camel was the frontline single seat British fighting aircraft during the later years of WW1. Designed and built at the Royal Aircraft Establishment at Farnborough it excelled in performance in the medium to high altitude role - above 10,000ft - whereas the Camel was superior at low to medium altitudes. The SE5a was flown by notable Aces of WW1, such as Captains Albert Ball and James McCudden with almost 100 victories between them.

The Flair kit.
The 1/6th scale kit from Flair gives a wingspan of 51in and a weight of 6lbs. It is made from Liteply and Balsa with hardwood used at high load points. Covering will be Drab Olive and Antique Solartex and my model will be powered by an OS56A four stroke glow. Sadly Flair kits are no longer in production although if you are lucky you may find one on a shelf in the model shops or on Ebay. A reliable source however informs me that it's just possible that a buyer might be found for the business. Let's hope so.

Picture shows the SE5a at its current stage of construction (Jan 2021).

Looking good Bob!

A chance conversation with Bob about my 3D printing experiments has led to me getting involved in the SE5a project. I am currently developing a 3D printed dummy engine block / exhaust system for Bob. The initial design is very simple; done mainly as a proof of concept. It came out better than I expected so the next stage will be to add more detail (exhaust flanges, rocker cover). More on 3D printing in a future article !



3D Design in Fusion 360

First print

First Flights

Mike Theobald has spent his time during lockdown building a Vintage Aircraft Spitfire. The laser cut kit spans 40 inches and has a built up 'slot together' structure. Mike has modified the open rear fuselage structure with a planked balsa covering, in Mike's words 'to make it look like a Spitfire, not a Hurricane'. The build was relatively simple, but would have been better if the parts had part numbers marked on as per instruction manual. There is a YouTube instruction video which helped to identify the parts and the order of build.

Mike used the standard electronics package which consists of:

- Emax 2215/09 1180kv Motor
- 30A ESC
- 4x 9g Servos

The first flight was an interesting affair. With Eddie Barker at the controls, the initial launch went well but it soon became apparent that aircraft only wanted to go right. With some skill Eddie managed to put it down gently just beyond the sheep fence with no damage. Mike likes to keep his control movements low, but this time they were probably too low! So with the aileron movements doubled the

second launch was much more successful and after some trimming the Spitfire was grooving around nicely. Flight times with a 2200 mah 3cell battery are a respectable 6 minutes with a good reserve in hand.

Nice one Mike

CAA update

You should all have had some communication from the BMFA recently regarding the update to Article 16 which controls the flying model aircraft and drones in UK airspace. The UK adopted the EU regulations for model flying in 2019 and they came into effect on December 31st, 2020.

Given the excellent safety record established by model flyers in the UK, the EU agreed that model flying conducted within the framework of the BMFA should be subject to more flexible regulation to allow us to continue largely 'as we do today'. The mechanism to facilitate this is referred to as an 'Article 16 Authorisation' and this document provides a guide to how the authorisation the BMFA has negotiated with the CAA applies in the UK.

Some requirements of the EU regulations were already in place (such as height limits, Operator Registration and Competency requirements) following changes to the Air Navigation Order set out in 2018, but the EU regulations introduce further changes.

The BMFA have put together a quick start guide to the regulations which can be found at:

https://rcc.bmfa.uk/wp-content/uploads/2020/12/BMFA-QSG-V16.pdf

You can read a more detailed review of Article 16 here:

https://rcc.bmfa.uk/article-16

Some of the keys points are:

- The weight limits have changed (maximum take-off weights now 7.5 kg and 25 kg instead of 7 kg and 20 kg)
- Separation distances to uninvolved persons have been introduced.
- BMFA members with aircraft less than 7.5kg can fly above 400 Ft (above the terrain)
- Aircraft heavier than 7.5 kg (that's about 16.5 Lbs in old money) cannot fly above 400 ft without permission from the CAA.
- Gliders greater than 7.5 and less than 14 kg can fly above 400 Ft above the pilot. (good for slope soaring)

As part of the regulations you need to prove 'competency'. There are 3 ways to do this:

1. Have a valid BMFA Registration Competency Certificate (RCC) which you can take here : Registration Competency Test
2. Passing the CAA online DMARES test and having a 'Flyer ID' more info here DMARES Quick Start Guide
3. Have a BMFA Achievement Certificate that was obtained before 31/12/2020 and confirming to the BMFA that you have read and understood the conditions and restrictions that apply when operating within our Article 16 authorisation. (N.B. Certificates gained after 31/12/2020 cannot be used)

Under option 3 you now have to login to the BMFA membership portal and tick a box to say you understand Article 16. It seems from now on you cannot use a newly acquired A certificate to prove competency.

What's on

I plan to include in this section some 'dates for your diary' e.g upcoming Hale Hall events, Model shows, full size aircraft shows, swap meets etc. If you know of any events that may interest our members please let me know.

Let's hope this year Competition Ken will have something to do!

Weston Park Model Show 18,19,20th June

Curiosity corner

So you think you have an extensive knowledge of all things modelling, well, can you identify the manufacturer, model and decade of manufacture of this?

No prizes, just that warm feeling you get when you are right. Answer next newsletter.

Parting shot.

So that is the end of my first newsletter, I hope you found it interesting. Many thanks to everyone who has contributed.

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 few photos or contact me and I will try and 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 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.

I will also be taking on the Website - when the BMFA eventually give me access. My initial intention is to keep things simple. I plan to canvas the membership to find out what you would like to see on the site.

You can contact me at andy.holden56@btinternet.com

Stay safe and let's hope our modelling life will return to normal later in the year.