

HALE HALL MODEL CLUB NEWSLETTER



SEPTEMBER 2021



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

Welcome to the September Newsletter. This month we have Chipmunks, a Weston Park model show report and an update on the mower.

Mower update

Saturday 18th September saw a small gathering of members get together to install the new mower deck. Some head scratching followed by the removal of a few bolts and spring clips saw the old deck quickly removed. The fully qualified 'deck technicians' then installed the shiny new deck in double quick time.



Old deck removed, looking in need of some TLC !



New deck ready for installation.



New deck installed and ready to go

The old deck was loaded into Eric Hand's van and transported back to his workshop for a much need overhaul. The deck has been sandblasted, primed and sprayed resulting in a fantastic 'as new' finish.



The deck after sandblasting



The finished article – looking great!

Many thanks to Eric for doing such an excellent job on the mower deck refurbishment. Roger reports that initial cuts with the mower were an improvement with less clogging, presumably due to the smooth finish of the new deck. The plan for the future is to swop the two decks regularly.

Flying Site update

We have arranged a meeting with our landlord, Laura and her father to discuss our plans for developing the flying site facilities. This will take place on Friday 1st October; hopefully I will have some good news to report in the next newsletter.

Chipmunk Chums

The Chipmunk has always been a favourite R/C model and has been widely available to us in many forms and sizes over the years, from plans to ARTFs. The attractive look combined with generally great flying characteristics have made it a very popular model, not least because Chipmunks are usually well-mannered and behave like a low wing sports model, but are capable of a reasonable aerobatic performance, just like the full-size. It's just what most club flyers are looking for and, as a bonus, you get a scale model without the cost and trouble of retracts. We have several in the club ranging from the multiple British National Scale championship winner of Dave Womersley, Steve Lacy and Bob Welton have Blackhorse ARTF versions and Andrew O'Neill and I have the ARTF from Seagull models. Neil Skinner's is building one from the Apache kit, I think there maybe others not known to me!

Seagull ARTF.

Span 80 inch

Flying weight approx. 11 pounds

I have had mine for a year or two, powered by a Saito 21 cc petrol motor, it flies well and definitely looks the part in the air. Seagull kits have improved over the years and this version is quite well built with good quality Oracover covering. Mine is resplendent in the yellow Royal Canadian Air Force colour scheme (there's also an Army Air Corps camouflage scheme). Engine mounts are supplied for both IC and Electric power. It comes with the sprung oleo-style undercarriage legs, working landing lights and flaps.

There were a few things that I wasn't happy with so, like many of us, I made a few modifications. The first was to add spin strakes, not for any aerodynamic reason but just to make it look right! This was relatively easy as I have the cub yellow version and was able to buy an exact colour match for the covering. Next change was to the canopy attachment, the original has nasty plastic bolts through the side of the fuselage. I added magnets to the rear of the canopy and a canopy latch at the front accessed through a hatch which also houses the switches and fuel filler. The pilot was a nasty thin plastic affair so I replaced it with better one from Rapid RC. Finally I updated the markings to represent the full size example at the Shuttleworth collection.



The basic parts straight out of the box



Strakes



Switch hatch and canopy latch



Ready to go

Andrew O'Neill has also made some modifications to his example. He also changed the canopy attachment, eventually ending up with vertical bolts fitted through the canopy base. He split the canopy 'to make it look more scale' and altered the firewall to clear the original NGH 25 Pitts silencer.



The split canopy

Andy has since replaced the NGH with a DLE 20cc which has been much more reliable. We have both had some problems with the undercarriage legs becoming loose in the aluminium mounting blocks. Andy has sorted his with larger pins and a very big hammer; mine is still waiting for a more subtle solution. The flap hinges are neat moulded plastic items but have a tendency to spring open. I have secured them with silicon fuel tubing, Andy hasn't and his flaps have been known to fall off in hard landings!

So overall our opinion is that the Seagull kit is pretty good value, flies well and with a few small modifications is a reliable model.

A scurry of Chipmunks

According to Google a collections of Chipmunks is a scurry. A few weeks ago three of the club Chipmunks all arrived at the field together, Mine, Andy's and Steve's. As I had my camera to hand so we decided to have a go at some formation flying. Having watched this done many times at model shows we thought it wouldn't be that difficult, would it? Well after several flights the answer was – it is definitely not easy! Dave Ringland made a brave attempt at getting more than one plane in shot at the same time, I think we needed a wider angle lens! He did, of course, manage to capture my demonstration on how not to land a Chipmunk, this unfortunately resulted in a twisted undercarriage leg and no more flying for the day. Andy and Steve carried on the formation attempts, eventually getting into the same photograph. Mr O'Neill is keen to try emulating a 'mirror' formation (one upright, one inverted) but so far I have resisted, I don't trust my flying abilities!



The three amigos!



About as close as Steve and Andy O'Neill achieved!



Off to try some formation flying!



My Chippy on the approach



How not to land a Chipmunk!



Andrew O'Neill's chippy on an approach.

SLEC Apache Chipmunk

Neil Skinner is building a Chipmunk from the Apache kit distributed by SLEC. Neil tells his story:

The idea started, as all things do with a combination of things.

The first was Terry Worden's advice that bigger models fly better and as I am a keen scale aircraft fan with not much experience a suitable scale trainer seemed the way to go. I was close to finishing a TopFlite Sea Fury and had a TopFlite Texan done in RAF scheme and hence a Harvard. The Harvard is a trainer but mine was heavy so seemed likely to be a handful to fly. A light, larger, scale or near scale trainer was needed so that I could come down a size to the Harvard and then the Sea Fury!

The second was seeing Brian Taylor and Dave Womersley scale chipmunks in the same competition at the Nationals. A real shame that two magnificent models should be competing against each other, but then buses always hunt in packs and there always seems to be two films on the same subject released at the cinema, so maybe it is that way.

The third was that I would prefer an ARTF but would modify it to look like the Fleet Air Arm version WK608.

The ideal candidate was an Airsail model that I had seen some time ago but it was, when I was gunning to buy this one, not available. There were some plans but I wanted to be airborne quicker than that, like three to four years rather than ten or more from a pure plan!

I had seen the SLEC 'new' chipmunk on display in their tent at various shows and whilst it was not scale-scale it was near enough for a training aircraft but I wanted the 'old' chipmunk. A bit of research ensued so at the next show I asked and they did not have one available so I asked where they had one. The show one was at their works in Thetford but it was a bit tatty and they had kits as well. I was going that way on a work mission within a couple of weeks so telephoned and then went to have a look and was happy with what I saw so bought one there and then. What a great place. Filled with balsa in tree sizes that were being cut down for the likes of us. I drove away a happy man.

The kit was complete barring a tiny amount of liteply and a couple of lengths of balsa which took nearly a year to discover but I had plenty of stock so it didn't matter but a great quality box of wood and a good plan for both versions though you have to say which one for the canopy and cowl etc. The printed plan was longer than the cnc cut parts but that was easy to sort out.

Building was very easy and, as is my want, I added a number of scale details – to which a small prize will be on offer (a remove before flight tag) for the person that gets all the 'scale' mods.

It's nearly complete save that I have decided to re-engine it with a DLE30. It's covered in Solartex and hand painted in various acrylic paints and will have some home-made transfers copied from the new Airfix 1:48 scale chipmunk that I was waiting for these very items. I would have gone to Yeovilton to get close up photos except COVID was all the rage and it seems Airfix decided to bless the world with a kit which has great transfers to copy!

Total build time is about 4 years so far though can't be sure of the exact start year.

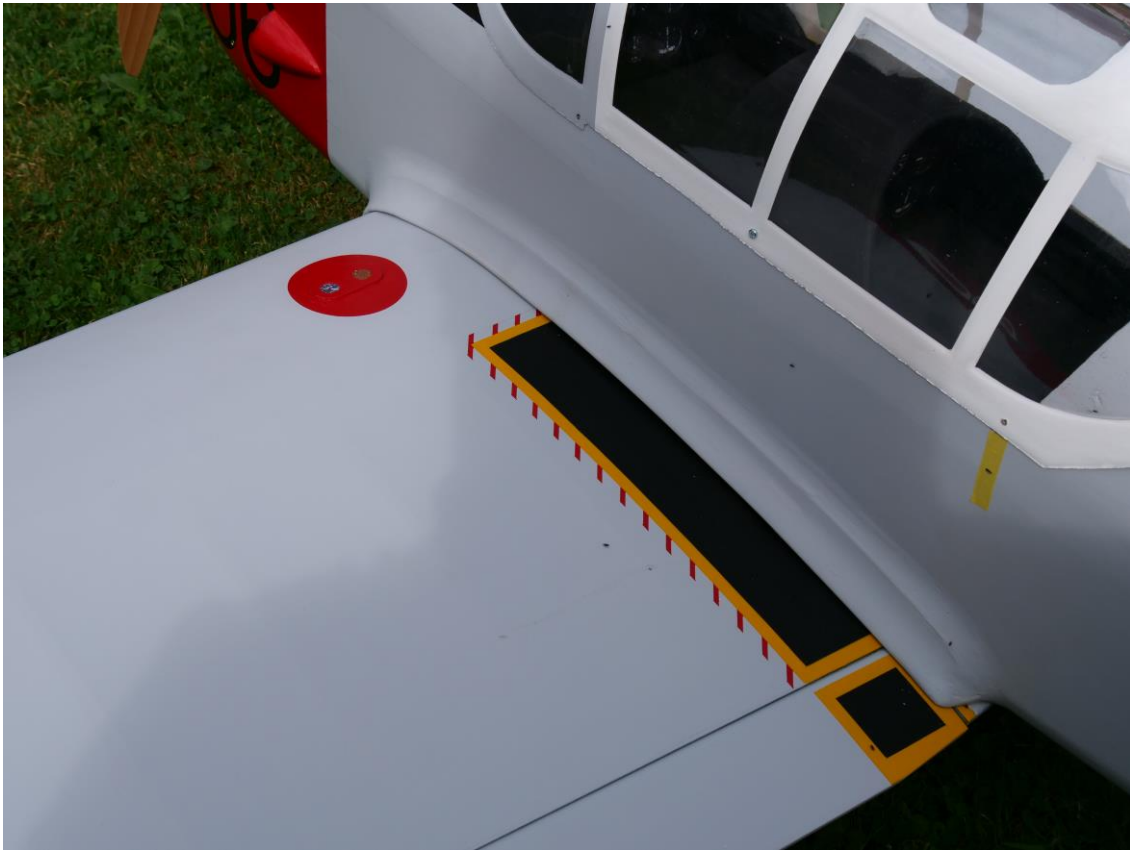


No 114

2021



Almost ready to go!



Neat Scale details



Adjustable tail wheel mechanism



Switch hatch

A very neat build with the scale modifications expected from Neil, let's hope you get to the field soon and we can try your 'spot the scale detail' competition!

Did you know?

Chipmunk history

Initially formed as a subsidiary of the de Havilland Aircraft Company on March 5, 1928, de Havilland Canada produced many of its parent company's aircraft before producing their first indigenous aircraft, the DHC-1 Chipmunk. Designed by Wsiewolod Jan Jakimiuk, the former chief designer of the Polish aircraft manufacturer PZL, it was developed as a replacement for the venerable de Havilland DH82A Tiger Moth. The prototype (CF-DIO-X) flew for the first time at Downsview, Toronto on May 22, 1946 and despite the crash of the second prototype on January 19, 1947 after failing to recover from a spin, deliveries of production aircraft to the Royal Canadian Air Force commenced in 1948.

The design of the Chipmunk took advantage of several wartime advances in aviation construction, resulting in an aircraft that differed from many previous de Havilland offerings. The most noticeable was the change from the trusted wood and steel tube to all metal construction. Fabric covering was still used on areas such as the wings aft of the main wing spar, the trailing edge flaps and the control surfaces; however, the wing leading edge and fuselage were of stressed-skin, metal construction. Two areas of the Chipmunk's design that remained true to traditional de Havilland ways were the shape of the vertical stabiliser and rudder and the use of a 142 hp de Havilland Gipsy Major 1C engine driving a fixed pitch, two-blade propeller



The Chipmunk prototype – pilot in his Sunday best!

The first production Chipmunks were given the designation DHC-1 and entered service with the RCAF as the Chipmunk T.1. The Royal Air Force also expressed an interest in the Chipmunk and, following evaluation of two aircraft by the Aeroplane and Armament Experimental Establishment at Boscombe Down in England, it was ordered for the RAF under Air Ministry Specification 8/48 as a fully aerobatic, ab initio trainer. The de Havilland parent company began building Chipmunks as the T.10 for the RAF and subsequently, some of these aircraft were passed to the Army and later to the Royal Navy. Although at first glance it was visually similar to the Canadian aircraft, apart from a multi-panel cockpit canopy instead of a one-piece version, there were many subtle differences. These included being built to imperial measurements as opposed to metric, the installation of a 145 hp Gipsy Major 8 engine, faired landing gear legs, different wingtips and cockpit layout, a slightly thinner aluminium skin and changes to the attachments for the wings and tailplane and elevator profile. Deliveries of the T.10 began in February 1950 with the Oxford University Air Squadron being the first to receive the type.

Even though the DHC-1 was originally designed and built in Canada, only 217 of the eventual 1,291 Chipmunks produced came from that country. The vast majority were produced in England with 1,000 rolling off the de Havilland production lines before production ended in 1958. Out of this total, 735 went mainly to the RAF as the T.10 and the T.20 export version with civilian models being built as the Mk.21. As well as the Canadian and British aircraft, a further 60 Chipmunks were produced under licence in Portugal by Indústria Aeronáutica de Portugal.

Not only did the Chipmunk prove to be very popular worldwide (allegedly seeing service in over 60 countries) but it also had amazing longevity. In Canada, the aircraft was finally retired from service in 1971 while those in the RAF were gradually replaced by the BAe (Scottish Aviation Bulldog) T1 but still continued training pilots until 1997. The aircraft has excellent handling characteristics which, when combined with its beautifully harmonised controls, has led to the Chipmunk being described as "just like a Spitfire to fly but with a lot less power". The current use of a T.10 to train Spitfire pilots for the RAF's Battle of Britain Memorial Flight is perhaps a testimony to this. Of the estimated 500 Chipmunks still in existence, the vast majority are still airworthy and in private ownership.

T10 Spec

Powerplant	145hp De Havilland Gipsy Major 8 engine
Span	34 ft 4 in
Maximum Weight	2,100 lb
Capacity	Two occupants (pilot and instructor)
Maximum Speed	138 mph
Cruise Speed	119 mph
Range	280 miles

Spin Strakes

As I had retro fitted strakes to my Chipmunk I thought it would be interesting to find out something about them on the full size aircraft. The early aircraft were built without spin strakes; but after some spinning accidents they were retrofitted to all UK aircraft in 1958. The general consensus is that the strakes improve rudder authority by energising the airflow over the fin at high angle of attack. This helps recovery from the spin.

Opinion varies on the need for the strakes, indeed the De Havilland chief test pilot, George Neal, apparently thought they weren't required. Requirements for the fitting of strakes varies across the world with some countries not mandating them. In the UK the type acceptance data sheet prohibits aerobatics and spinning for strakeless aircraft.

Weston Park.

After suffering for nearly two years with no model shows to visit there have been two in quick succession! Only a few weeks after the Elvington LMA show it was time for the Weston Park International model show. This had been delayed from its usual date in June to the 3rd – 5th September due to the dreaded Covid. Our Weston crew this year were Neil Skinner, Andrew O'Neill and myself.

In previous years Andy has had some success in offloading his surplus modelling goods at the Weston swapmeet, so this year I decided to take the plunge and see if I could get rid of some of my hanger queens. Andy also had some things to sell so early on Saturday morning we loaded up our excess stock; Andy, Neil and I squeezed into the front of Andy's van and we set off for Weston. After a good journey we arrived at the entrance and headed towards the parking area to be greeted by the usual enthusiastic attendants keen to guide us to correct parking spot. As we had a van full of large models to deliver to the swapmeet Andy decided to ignore all their instructions and head to the parking behind the swapmeet, we were in a white van after all! So we headed past the official car park and turned right, only to end up in the middle of the trade stands surrounded by confused members of the public! Being a well-rehearsed white van driver, Andy kept his cool and we made our escape through a gap next to the swapmeet. Our 'for sale' items were duly unloaded and we joined the queue to register our selection of models, engines and radios. My AcroWot XL attracted a significant amount of interest, but as selling items in the queue is frowned upon, I resisted the suggestion to meet behind the third tent on the left! I politely refused the next offer to buy it only to be informed that he was the owner of the swapmeet and one of his staff was interested! He even

suggested I increase the price, so I ended up jumping the queue and selling one of my models for more than I was planning, Result!

After that excitement we headed over to the main show area. The layout of the trade and flight line was significantly different to the usual one, a large circular spectator area surrounded by the trade rather than the usual narrow strip. It wasn't clear if this was to allow social distancing or due to the lack of trade stands, but it provided a much better viewing experience. After a quick trip around the trade, slightly better than Elvington but still way down on a 'normal' event, we had our first coffee and chocolate brownies (no donuts at Weston!). With the weather improving we settled down in our chairs to watch the flying. The display started at 10:00 and was scheduled to continue until 18:00 and included three slots of full size aircraft. The rest of the day was spent watching the flying display interspersed with browsing the trade and checking the swapmeet to see if anything had sold.

The flying display was entertaining, maybe not quite up to the usual standard, but definitely worth the trip. Some of the highlights were:

- The Reds duo, Steve Bishop and son's tribute to the red arrows. Always impressive.
- full size – the global stars aerobatic team – flying 4 Extra 330s. Amazing formation aerobatics.
- full size – Spitfire fly by.
- Extremely loud pyrotechnics as part of a dog fight display.
- Huge piper cub duo display by AZ Aerosports.
- full size – Aerobatic glider display – with smoke.

I understand that several Hale Hall members made the trip down to Weston, we only bumped into Mr Ringland and son who joined us for a while.

By about 16:30 we were ready to leave so we made our way back to the swapmeet to see how successful our sales campaign had been. To our surprise everything had been sold for the asking price so after collecting our cash we jumped in the van and headed back to Preston. Overall a very enjoyable and profitable day out, why not give it a try next year?

The day in photos:



The Reds duo





Dog fight Pyrotechnics – very loud!





Full Size display

Neil was tempted by a laser cut kit
from Century UK.



Parting shot

So that is the end of another newsletter, I hope you found it interesting. Thanks to all contributors.

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.

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