WLMAC Newsletter November 2020

Editor – Felix Scicluna

A moment at the patch, Our Jason found himself stranded one training Saturday morning, well almost! Where are the trainee's? Also, this is why the restraint benches have since been moved back to the main pits area.

Parish Notices

Welcome to our November Newsletter, again this month, we will not be holding a club night. Members have been visiting the field following the BMFA and government guidelines. With winter looming, the weather pattern is changing, we have all tried to visit Harefield as often as possible. The TV Company have been sending their representative, asking us to briefly stop flying our IC models and work in our new field at Pickerage farm is progressing well. At the end of the Newsletter we have some items for sale by Andy Blackburn.

Covid 19 2nd Lockdown- Once again we find ourselves in lockdown from this Thursday 5th November field is closed, please look at the club website http://www.wlmac.co.uk/ for details.

Field Mowing- Compliments have been pouring in again this month to our field marshal Tony B who has been making an extra effort on the edging. It's all looking very smart, well done Tony.

Club AGM and Nominations

Members of the committee who organise, regulate and run the club are not self-appointed - they are elected by the membership at every Annual General Meeting, which this year will be a Zoom meeting, details to follow.

So, once again we invite volunteer members to give their serious attention to the Club's routine business. The club constitution calls for 21 days' notice for an application for membership, so the application form is shown below. Put yourself up for a year's service on the Committee by getting yourself a proposer and a seconder from among your fellow members, filling in the form overleaf and firing it off to the Secretary, Roy Lanning.

COMMITTEE MEMBER NOMINATION FORM

Candidate name (and E Mail address, please).

……..

Proposer.....Seconder.....

I agree to serve on the Committee for one year.

Signed.....Date.....

PRINT THIS PAGE AND RETURN FORM TO Roy Lanning. WLMAC Secretary. 5,

Thellusson Way, Rickmansworth WD3 8RB

Engine tuning tips, by Tony Bloomfield – This is the last of the 3 reports, If there is a demand for more I'm sure Tony will oblige. This month is on fuel.

Ok, so we have a good plug, a well plumbed tank, all that's missing is some go go juice, fuel. This topic is probably the biggest can of worms there is, so I am going to be straight to the point.

Methanol, nitro and oil, oil being the main part of any fuel so let's start there. Most engine manufacturers specify the amount of oil to use in their engines whether it be mineral or synthetic, this is where the guesswork stops if they say not less than 18% then that's what you do. I use fuel with 18% oil and I add 2% castor oil.

Nitro the next ingredient of fuel is used as a combustion additive so in America high nitro is used because of the atmosphere doesn't lend itself to a good explosion but in the UK it's cold and damp so we don't need as much. Also nitro acts as a coolant so cools the engine that's why helicopter engines and RC car engines use high contents of nitro (20-30%) because of the high stress factor they are used in. I believe no more than 15% is needed in our planes in hot weather it will help, starting it will help and also a better reliable tick over will be obtained. Methanol is methanol so it has to be there to dilute the rest of the ingredients. What I will say is over time methanol will absorb moisture (water) which is not good going through your engine and that's why I wouldn't use old fuel.
Ok so that's it from me three articles and if one person has took note or learnt something my job is done. Look forward to answering any questions at the field if I can.
PS I can write a book about what I know but could fill a library with what I don't know!

This is the fuel I use with 2% castor oil added!

Southern Modelcraft fuel is available from the club prices as follows:

5% Nitro Synthetic Based £15:00 Per/Gallon

10% Nitro Synthetic Based £17:00 Per/Gallon

20% Nitro Synthetic Based £22:00 Per/Gallon

Methanol £6.00 Per/Gallon

Other fuels can be ordered through Matt or John F. See Southern Modelcraft fuel website http://www.southernmodelcraft.co.uk/model-fuels.php

A day at the patch- Sunday 18th October, a cloudy and very calm day. We had a good turnout of mostly social distancing members who responsibly brought their own chairs etc. and didn't touch other people's stuff.

A showery windy day at the field- The forecast Monday 26th didn't look good for planes, so we thought that there would be little chance of having to stop flying our hele's to let the planes fly or the and the TV company film asking us to stop. Sure enough we were not disturbed apart from a few showers.

Projects

Our new member and trainee Jeff Rooke's (introduced below) has started a build of a traditional Wot4 mk3. This only just started kit was kindly donated to WLMAC together with a used OS 46 by member Andy Hopper. It came from a recently deceased friend. Jeff made a generous donation to our club funds and has started to put it together already. Further photos will follow as the build progresses.

Andy Blackburn's Seagull P-47 Kit (not the ARTF) -

I do like warbirds, there's nothing quite like flying something with a bit of momentum and poise. Unfortunately, my current warbird (Hangar 9 109F) is rather too sensitive to crosswinds because the undercarriage is narrow, which means that it doesn't tolerate crosswinds – once it starts to ground-loop, it's difficult to catch. I seem to remember reading somewhere that the Luftwaffe lost more 109s in landing and take-off accidents than it did to enemy action.

The nett effect of this is that I don't fly it very much, which is a bit of a shame because the late-model 109 is possibly my favourite WW2 fighter. It also means that I really need to find a new warbird (preferably a P-47, because that's my second-favourite) that I can use as a weekend hack.

I *could* just buy an ARTF, but then I'd have to put up with the inevitable compromises in outline. The Brian Taylor plans are accurate but if you want yours to weigh what BT's original did, the wood has to be light and the available laser-cut wood packs usually aren't. The Hangar 9 120 size P-47 looks really accurate but is pricey and it looks as though you need a second mortgage to pay for the retracts and oleos.

So I was more-or-less resigned to buying one of the Seagull 90-size "SNAFU" P-47 ARTFs when I happened to see an advertisement for what looked like a kit that would build the same thing, only for about £100 less than the ARTF. Oooh…

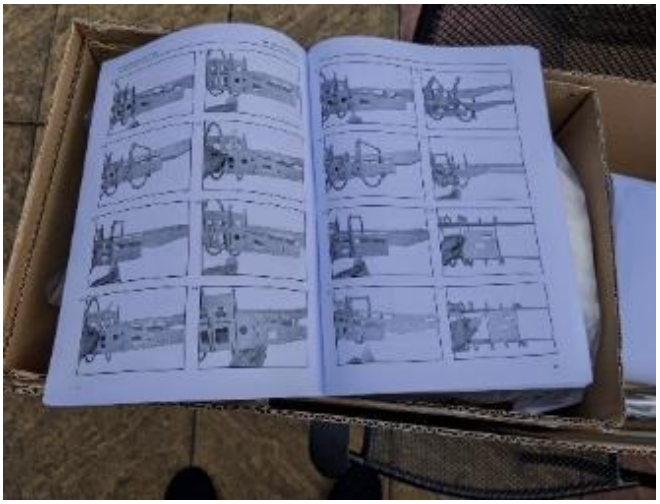
The kit arrived from TJD models after about a week (I think they were waiting for a couple of OS "F" glow plugs that I ordered at the same time). It's quite an impressive effort…

The usual big box...

As far as I can see, ALL the parts are cut to size - wing skins included. I might replace some of the tail-surface parts with lighter ones.

Accessories look fine (e.g. glass fibre sheet control horns), I have no problem using them.

The plan is enormous, but then the model is a 1/8 scale Thunderbolt, so it would be.



The instruction booklet is mainly pictures - lots and lots of pictures.

Retracts are mechanical 85 degree units with attached oleos. They seem to work faultlessly as long as there is some weight on the wheel. I'll use them.

The decal sheet is the same one that's used for the Seagull P-47G ARTF, the original of which is privately owned and currently resides in Texas. Don't know if I'll use all of it because I don't really want it to look exactly the same as the ARTF.

Overall, it looks like a nice model – you even get a bottle of white glue and a sanding block in the kit! Not sure what I'm going to power it with, yet – research is ongoing.

There are a couple of compromises though:

- In an effort to lose weight and save balsa, the wings and tail are open-structure aft of the spar, which means that if I want to glass it, the wing and tail skins will have to be replaced – and it'll be heavier. I might have to bite the bullet and cover it in film.
- At 3" diameter, the main wheels are a little small – I'll try and fit 3.25" or 3.5" robarts, but it depends on the space available in the wheel wells. Also, the undercarriage legs need angling forward about 10 degrees; most ARTF owners do this to stop it tipping on its nose.
- The nose and cowling have both been extended by about 1 1/4" in total. Luckily, I have some 1/24 scale drawings (1/3 model size) so I can do something about that, even though it means a new cowling.

I'm planning to build it over Christmas – I was going to say that it'll keep me off the streets, but we'll probably all be in lockdown by then ☺

Four Strokes for Warbirds

I'm currently looking at what four stroke I should use to power a new warbird (63" span P-47 Thunderbolt, expected weight about 9 1/2 lb); there are a number of candidate engines and for a while I was a bit stumped, because there are so many options. However, I think what we're really looking for with a warbird is a certain amount of speed and power so that the model can be flown in a suitably exuberant manner. What this translates to is the amount of air accelerated through the prop disk, which is effectively the speed that the column of air that's accelerated by the propeller; the model won't travel any faster than this in straight and level flight.

There is a rule of thumb to estimate the speed that the air leaves the back of the prop disk (the Pitch Speed), and it's this:

Pitch Speed (mph) =~ propeller pitch (inches) x RPM (thousands)

So, if we had a prop with an 8 inch pitch that the engine was turning at 9 thousand RPM, the pitch speed would be 8 x 9 = 72 mph, which is a decent amount.

(You <u>do</u> need a decent amount of pitch speed for a warbird. A number of years ago I was stupid enough to attempt to fly a Topflite AT6 Texan with a very tight, new RCV 91, which was only turning the running-in propeller (a 14" x 6") at about 8200 rpm (pitch speed = 49 mph!). It took off (just) but the only way I could get it to climb out of ground effect was to retract the gear. After about 10 wide circles at full power, the engine stopped (too new, too tight) and I only just managed to get it back down in the failing light with nothing worse than a bent undercarriage leg.)

Anyway, after looking at some old engine tests on sceptreflight.com and checking the tested rpm on each prop, some very interesting comparisons can be made – it looks as though an OS FS120 or a Saito FA100 is the engine to have:

Engine	Fuel	Prop	RPM	Pitch Speed (mph)
OS FS120 Surpass	10% nitro	14" x 8"	10,600	85 ← pumped, for F3A
Saito FA100 GK	15% nitro	14" x 8"	9600	77
Saito FA100	10% nitro	14" x 8"	8950	72
OS FS120	10% nitro	14" x 8"	9000	72
Saito FA-91S	10% nitro	14" x 8"	8700	70
OS FS91 Surpass	10% nitro	14" x 8"	8600	69
Saito FA-82a	10% nitro	14" x 8"	8200	66
RCV-91CD (run-in)	10% nitro	14" x 8"	8200	66
RCV-91CD (new)	10% nitro	14" x 6"	8200	49 ← suicidal – don't do this!

Tony Bloomfield's Seagull Bucker Youngmiester build- Having ordered and waited months and months for it to arrive, the wrong colour was sent, Waiting even longer, when the correct colour was sent, Tony found that there were two top wings in the box. Luckily his supplier had 2 delivered at the same time and the other one had 2 bottom wings in the box. The build has not been plain sailing for Tony, he needed help to fit the engine which took a while and to top it all the cowl was accidently damaged, luckily Mat has kindly offered to repair and re-spray it for him. In spite of all the problems, it is now coming together. Let's hope the rest is going to be easy.

New Members

Welcome to new member Jeff, thanks for writing a few words to introduce yourself, we look forward to meet you at the patch.

Hi I'm Jeff Rooke and I have joined the club after clearing out my dad's loft and finding my old planes and engines from my teenage years.

As soon as I cleaned and started one of the engines the bug was back!

I started building free flight balsa models and progressed to a WOT 4 and then I moved swiftly on to beer and women and children where my hobby took a pause for 20 odd years.

Since getting back into the hobby I have been furiously hoarding any damaged / old / needy aircraft and engines from EBAY/ Facebook and friends and family but am still only a beginner and needed the club's expert guidance and training.

If you see me down the club please feel free to say hello and teach me some new skills.

Stay safe

Jeff

Events are all cancelled, details left on in case the restrictions are lifted

Date	Event	Location	Description
Thursday 12th November	Club Meeting	Uxbridge Golf Club	Possible quiz night
Thursday 10th December	AGM	Uxbridge Golf Club	Membership renewals
Thursday 10th December	Christmas Meal	Uxbridge Golf Club	Partners are welcome but are required to pay full price of meal