WLMAC Newsletter January 2018



Editor – Andy Blackburn



No-one has sent me a suitable header picture this month and I daren't use any of the pictures that Chairman Mat has sent for fear of being sued, so here's a picture of my slope soaring Canberra B.2 at Ivinghoe Beacon. It's one of my better efforts and has a surprising level of performance for a PSS model. Span is 43.3", weight is about 2.7 Ib. It's free plan in the December 2017 RCM&E (Dave Woods photo via Andy Blackburn).

Parish Notices

Eyesight

Just a quick note; there have been a couple of recent events that have caused the committee to question the eyesight of various members and it was felt that a gentle reminder would not go amiss – you should be able to read the number plate of any vehicle when stood in the pilot's box. If you can't read a number plate clearly, there's something wrong so <u>stop</u> and get it fixed before flying again. We do NOT want an accident.

Using LiPo Batteries in Winter

Most of you electrickerists will know this already but it probably bears repeating;

- a. LiPo batteries do not like the cold and will not perform well at low temperatures; duration will be less than expected and if you have a good charger, it should refuse to fully charge the battery if the temperature is too low.
- b. The voltage of a LiPo battery will *increase* as it gets colder.
- c. Lithium-based batteries should never normally exceed about 4.2 volts otherwise there's a risk of it losing capacity, and I hear dark but unsubstantiated stories of a potential ignition risk.

What this means is that if you charge a LiPo in a nice warm house and then take it to the field and let it cold-soak for an hour or two, you're asking for trouble because there's a good chance that it will over-volt to the point where permanent damage will occur, and if it gets to that state the charger might not want anything to do with it either, until it's discharged to a reasonable level.

(Actually, a couple of years ago one of my mates managed to wreck several hundred pounds worth of high spec batteries by leaving them with a fair bit of charge outside in the garage all winter)

What's the Best Model for Training? – Andy Blackburn/ Mat Dawson

Those of us who have to fly the many and varied models that new members turn up with have formed some quite definite opinions about what's good, what's not so good and what's truly awful; I'm fully aware that most people reading this will not be concerned with finding a model that they can learn to fly on, but there's always the chance that:

- a. One of your friends will ask you what model they should get, and
- b. Someone in the model trade who has a conscience might be reading...
- c. You're a bit rusty and need to re-hone your skills and are looking for a suitable Christmas present?...

IC or Electric?

I suppose the preliminary question is, do you want to go electric or IC? This will obviously depend on your inclination, but I should point out that you will probably get a load more stick time with IC and be a lot more oily; the best duration I've seen from a "suitable" electric trainer in normal use is about 7½ minutes but an average IC trainer will typically provide a flight time of about 12 minutes on the supplied tank even after thrashing it in the pits and holding the nose up etc, or 15-18 minutes if a bigger tank is used.

But a suitable electric trainer is most definitely useable, you just need more batteries and your instructor will get more take-off and landing practice; 5 of the largest Lipos's that will physically fit in the model would be the minimum for an average session. These can be then be brought to the field, charged and ready to go which means you don't then necessarily need to lug about a field charger or leisure battery or hang around waiting for batteries to charge whilst watching the IC'ers churn out flight after flight.

General Characteristics of a Good Trainer

In the olden days, it used to be the case that a trainer was thought to be good if it was slow, stable, extremely tough and could get itself out of mild degree of trouble, but these days everyone is on a buddy box so we can get away with a lot more; in general terms, what we need is:

- a. A decent amount of weight; this is perhaps a bit counter-intuitive but we fly in an area surrounded by trees and when the wind blows which happens a lot as we're on a hill we need something with a fair bit of momentum that will cut through all the gusts and turbulence; I'd say a trainer needs to weigh about 6-7lb (~3 kg), and not less than 4.5lb (2 kg).
- b. A small amount of positive stability (see below) with a clean control response the BMFA tests stress precision so we want the model to do what it's told, and *only* what it's told; for instance, if the nose pitches up when throttle is added, that doesn't help it just makes it more complicated for the pupil (and the instructor) to fly.
- c. A certain amount of robustness. If it's a heavy airframe it'll be quite tough anyway.

Best Electric

This is an easy assessment; the best electric airframe that I've flown – by some considerable margin – is the Seagull E-Pioneer; it's smooth, has a progressive control response, is repairable, and does what it says on the tin. It is largely ready to fly and needs minimal assembly, skills or tools to put together – but set the control throws up carefully if you want it to fly nicely;



Also, as it doesn't come with motor or servos etc so you can choose decent gear for it, rather than put up with some of the (for want of a better term) Tat that comes with the flight-ready offerings. 4Max do good deals, get the biggest battery that will fit and a motor/prop to match. And, use a separate receiver battery (a 5 cell Eneloop is the preference).



Chairman Mat is of the opinion that the Riot XL (Century models) or the standard Riot are also suitable *(if you like that sort of thing - Ed)*; the basic Riot is particularly good value although you will probably end up swapping out some failed servos and tail wheel brackets at some point.

Also, bear in mind the XL isn't particularly cheap for a

lump of foam and does need fairly large lipo's. Riot XLs do come largely flight ready and apart from installing a receiver, flight pack and doing the necessary pre-flight checks they are pretty much ready to go.

Best IC



If used with a buddy system (which it will be at WLMAC) the Blackhorse Travel Air (low wing, tail dragger) with a decent .46 2st is a really, really good trainer. The only modification needed is to put on bigger / better wheels and beef up the undercarriage mount after it rips out (which it will).

The Wot 4 is also pretty good providing it isn't overpowered, <u>but</u> some people have difficulty with the Wot 4; beginners naturally tend to hang onto the aileron stick a little bit after starting the turn and since the Wot 4 has no dihedral it will just do what it's told and carry on and roll inverted, often leading to a loss of confidence in the model because the pupil thinks it's done something unexpected.



Ripmax Wot4 Mk 2



Ripmax Wot Trainer

Also, (again) the undercarriage mount will need beefing up unless you've built it from a proper Chris Foss kit rather than an ARTF. However, if you're coming back to R/C after years away, it's probably one of the best choices. The Trainers of choice at the R/C Hotel in Corfu is one of the following. For IC - the Ripmax Wot Trainer, it *is* a very nice flying machine, like all Chris Foss' designs – it has a big wing so flies a little bit slower than some of the other here models mentioned here so might be a little bit more sensitive to gusts, but on the other hand it is extremely easy to land – it's almost a case of reducing the throttle to idle and watching it land itself. For electric they use the ST Models Discovery.





Irvine Tutor 40

Seagull Arising Star

Finally, some of the more traditional trainers such as the Irvine Tutor 40 have been around for years because they're very good at what they do; two of the best are the Irvine Tutor 40 (does what it says on the tin) and the Seagull Arising Star (This was the club trainer for ages, it got loads of members through the A test).

Sometimes, a particular model isn't available in the shop but any of these would do. If you're not sure which one you fancy, turn up on a Saturday morning and see if someone will let you have a go with theirs for a circuit or two, with an instructor, obviously.

Finally, once a trainer is finished with, there will be a ready supply of novice flyers who will be only too pleased to take it off your hands for a consideration, as long as it's in decent nick. And of course, the club does promote recycling wherever possible.

Worst Trainer Ever



I'm afraid that the prize for the worst possible choice of trainer must go to the Multiplex Fun Cub (and anything that looks similar); it's far, far too light and therefore has no momentum and gets blown around even in quite light winds, it's pitchsensitive to power and doesn't handle at all well – Flying straight and level in anything other than flat calm isn't easy

because it's very sensitive to turbulence, a bit like a dandelion seed in a mild summer breeze. It

requires a little bit of power on to land and even then no-one is quite sure exactly where the wheels are going to touch... it feels truly awful and I wish folks would stop selling them.

In fact, I'd really prefer it if Multiplex did a product recall and burned the lot. In a big bonfire. They could invite the local broadcast media and give interviews assuring the public that it was all for the best... Newcomers choosing this will get really good at repairing foam and motor mounts, as well as sourcing replacement motors. However, the Multiplex Mentor (now sadly discontinued) was a good trainer and is one of the few foamie trainers that I would recommend in spite of my distaste for foam - so if a second-hand one comes along it would be worth considering.

Club Meetings

WLMAC AGM, Thursday 14th December 2017



Order, please, Mr Speaker!



Colin Martin was elected onto the committee



Here they are - as fine a body of, er, committed members as you could ever hope to meet...



It's almost worth having a caption competition for this; in the background, just what do we think Tony Parrott is saying to John Smith?

Subs were collected, nibbles were nibbled and Mat and Stuart ran through the events and finances for the year. The Committee was re-elected including a brand new addition Colin Martin (see photo above). The membership then had an open discussion, one of the items raised was

could there be the possibility of finding a different venue for the meetings as the hall was rather cold. In <ahem> "a stunning and awesome display of pro-activeness", the committee have already identified another candidate venue, if suitable, details will be provided in the next edition of the newsletter.

Events

Date	Event	Location	Description
Friday, 15	Indoor	Vyners School Gym	Indoor Flying 7.30-9.30 pm
December	Flying	Ickenham	
Friday, 19	Indoor	Vyners School Gym	Indoor Flying 7.30-9.30 pm
January	Flying	Ickenham	
Thursday, 08	Club	Battle of Britain Club	Winter projects/Bring and Buy
February	meeting		
Friday, 16	Indoor	Vyners School Gym	Indoor Flying 7.30-9.30 pm
February	Flying	Ickenham	
Thursday, 08	Club	Battle of Britain Club	Skills Evening - Demos by Dave
March	meeting		Chinery and Mat Dawson
Friday, 16 March	Indoor	Vyners School Gym	Indoor Flying 7.30-9.30 pm
	Flying	Ickenham	
Thursday, 12	Club	Battle of Britain Club	"Drone" racing
April	meeting		
Thursday, 10 May	Club	Battle of Britain Club	Chuck Glider competition
	meeting		

Finally, merry Christmas and a happy New Year to all WLMAC members



Merry Christmas to you and yours and a very happy new year. Picture courtesy of Chairman Mat