



*Tony Taylor's Great Planes Stearman with an OS 90FS, flown by John Smith (Tony Taylor Photo).*

## **Editorial**

I said I wasn't going to write much for the newsletter but events have conspired against me. Bit disappointed that we haven't had a letter of complaint after the last Newsletter, if I'm honest. Dave Orrells is in pole position for the (highly valued) work-party prize, although Tony Taylor's heading picture deserves an honourable mention.

## **UAVs in the Ukraine – Dave Orrells**

As most will know, I work for our Foreign Office but I'm seconded to work with the Organisation for Security and Co-Operation in Europe. I work in eastern Ukraine in Luhansk monitoring the ceasefire between the two sides following the war in 2014/15.

Imagine two Counties in the UK declaring independence from the rest and receiving backing from the neighbour, in this case, Russia. They had a fight about it and now there is a ceasefire agreement and whilst most of the fighting has stopped, it hasn't by any means finished. We go out and report what we see, this gets reported back to the 57 member Countries of the OSCE and pressure can be bought onto the sides to try and stop the fighting.

Which brings me to what I actually do; because of the terrain and the size of Ukraine, there are many acres of land away from roads. We stick to tarmac roads because of the risk of mines and unexploded ordnance. My car is fully armoured but an anti-tank mine will make mincemeat of it

and me inside. Both sides make the most of this by hiding their really big stuff out in the countryside away from our prying eyes. The ceasefire has got clauses about moving their tanks, artillery and rocket systems many kilometres away from the 'contact line' and out of range of each other. Both sides have ignored this and hidden stuff away that they use to bang away at each other at night. Both sides then blame the other for pounding them senseless but denying that they fired anything in return. We don't patrol at night, it's too dangerous, and so it turns into a free for all at night.



*Here we all are, the five trained pilots. Zoltan from Hungary, me, Venko from Macedonia, Yuksel from Turkey and Marko from Croatia.*

So, we've bought some French-made UAV's with cameras to fly over these areas to see what we can see. I've had nothing to do with the selection process but I've been trained to fly the Delair Tech DT 18. To you and me this is a 1.8m electric powered glider. This has a fibreglass body and wing, powered by Lipo batteries. The plane carries two cameras and flies a pre-programmed route taking snaps at one a second for the whole way. The thing can fly up to 20 km away from the base station and the flight is totally automatic after launch. The landing is automatic too but the pilot can help ease the final flair to make the final contact as smooth as

possible. The French company designed this to survey rail and power lines, looking for overgrowing trees. It normally flies about 140m above the ground but is totally autonomous in flight.

The real problem is that the winter in Ukraine is much, much harsher than France. So far, we've had it out when the ground temperature has been -13C, January and February are normally -25C.

So far, the plane has not liked the cold and the real duration has been cut from 2 hours to 30 minutes. The battery is a 4c 8900 mAh LiPo and fits inside the wing which is clever, this leaves the body free for the cameras. We go out, programme the plane to look at areas where we believe stuff to be hidden and then launch it. We fly it around 200-250 m high as their makes it a lot harder to shoot down with an AK-47. There is a total ban on anything flying



*Here we have the flight battery (the boomerang shape) which fits into the wing, the connection is made when you bolt the wings onto the fuselage. The plane is a standard powered glider, weight has been stripped to lengthen the flight times.*

over here in this area but both sides fly their own drones to spy on the other side. Both sides happily squirt away at anything they see in the sky, this can be an AK or ZSU 23mm anti aircraft guns. At the end of the days flying we extract the photos from the encrypted SD card and then someone has got to trawl through all the photo's looking for military hardware.

So, it's not flying as we know it, I didn't set out to do this, they launched this programme after I came out here. But, it's better than nothing. The real difference is that this thing sets you back E40,000 which is nearly as expensive as one of Roger (Darvell's) planes!

## ***Training days***

Club training days have resumed, in spite of the inclement weather. If you are of a hardy disposition (or just really keen) then please do email Chairman Mat - Training is on Saturdays between 9:30 and 12:30. To my amazement people have actually been turning up, in spite of the sub-arctic weather and the unreasonably early start; here are a few pictures:



*Roger Freeborn readying his Multiplane Fun Cub.*



*Chairman Mat's wind meter. I'm told that as long as the casing stays that colour, it's OK to fly. He doesn't say what colour it goes if it gets too windy.*



*The Pits on 14th January... wait a minute, is that rain on the camera lens?*



*Chairman Mat's measured and impartial contribution to the electric debate; here are some electric motors and batteries being put to good use.*

## ***Stick and Tissue as Therapy – Andy Blackburn***

I'm (in)famously bad at actually finishing projects, being blessed with the attention span of a Goldfish; there are usually half a dozen projects of various types on the go simultaneously so progress can be agonisingly slow at times, and there's a regular traffic of part-built projects between the workbench and the loft, which is now full of part-built models – at a conservative estimate there are about a dozen part-built models, and at least double that number of un-started kits.

This is a serious problem; I started a Flair Fokker DVII build in August 2013, lost momentum on the tail surfaces and the wings are still in the loft. And it took me about a year and a half to finish a Hangar 9 Messerschmitt 109F **ARTF** – in fact, by the time mine was ready for its maiden flight, the kit had gone out of production! Most embarrassing. I think the record for project non-completion is a slope soaring EE Canberra design, it was first put down on (virtual) paper about seven or eight years ago and is now (finally) nearing completion. Needless to say, this state of affairs is an endless source of merriment for one's flying colleagues...



*Aerographics Luton Minor*

Anyway, as some of you may be aware, last year I got interested in indoor F/F rubber scale again after a gap of at least 35 years; I built a 20" span Luton Minor from a traditional Aerographics (printed wood) kit and it only took about 5 months, which for me is unheard-of.

It's flown indoors but hasn't been easy to trim, partly because of the tiny fin area (good left circle under power, or good left circle on the run-down/glide, but not both. Flatly refuses to fly right-hand circles), and partly because I've forgotten how to do it - I seem to revert to "impatient ham-fisted oaf" mode when trimming. I managed to fly it into a wall last time out and am now seriously thinking in terms of converting it to indoor R/C.

### ***Cessna 140***

Anyway, for a number of reasons (bucket list, etc.), I've decided to have a go at BMFA Kit Scale so after a brief period of research (e.g. "ooh, that looks nice...") I got a Cessna 140 kit from the Vintage Model Company - all laser-cut parts, very good balsa, extremely comprehensive instruction booklet, even comes with PVA glue.



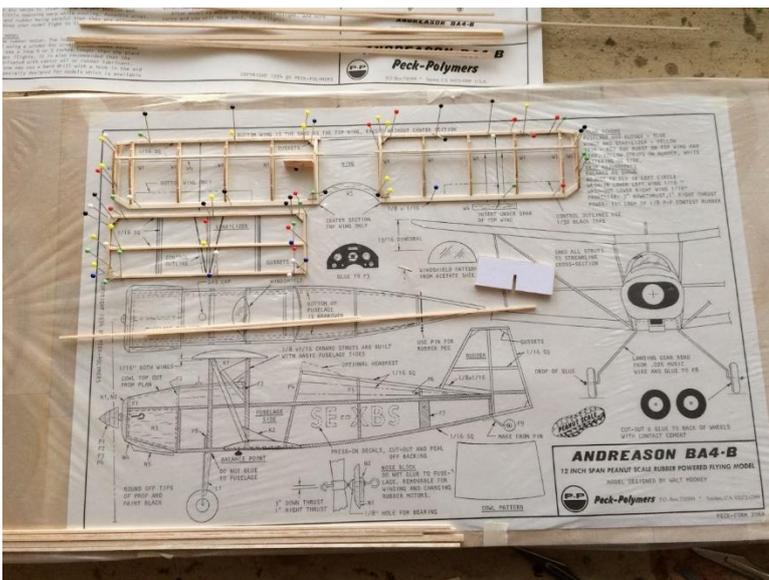
*Vintage Model Company Cessna 140*

So, around the beginning of December I started on the tail surfaces on the basis that they should be done at the start of the project when enthusiasm is at its peak, and surprisingly they went together really quickly, and everything seemed to fit with only minor sanding/adjustment – so I started on the wings (see picture). By this time, I was starting to realise that all the parts fitted and it gradually dawned on me that it was fantastic fun!

I suppose I shouldn't be surprised because I spent almost every waking hour when I was younger building Keil Kraft flying scale series models, but I really hadn't expected the level of achievement and satisfaction that seems to be attainable when building with good balsa and laser-cut parts that actually fit.

After about three weeks I had a complete Cessna 140 structure and then spent the remainder of the Christmas break covering and doping it (well-thinned non-shrinking dope, available from The Balsa Cabin and all good model shops). Total time to get to this point was about a month, which for me is unheard-of.

### ***Peanuts...***



*Peck-Polymers Peanut Scale Andreason BA-4B*

At this point, I decided that I really wanted a Peanut Scale model, partly because it's quite difficult to trim some of the larger kit-scale sized model to avoid the walls in the rather average-sized hall that I fly in (it's four badminton courts, so very approximately 50 ft x 100 ft). But also because I built a peanut Andreason BA-4B from Walt Mooney's original plan many, many years ago, and I had a Peck-Polymers laser-cut kit of the same design hoarded in a cupboard somewhere.

I confess to mild feelings of disquiet when performing my usual ritual of packing away the current project, but I told myself that the Cessna was nearly finished and it would be worth it in the end. And, anyway, I had loads of time to finish the Cessna as The Nationals is months away.

So then I dug out the BA-4B kit that I'd had for years and made a start. And amazingly, within about two weeks, all the major components were complete! Granted, the parts didn't fit quite as well as the Vintage Model Company kits which are state of the art and a real pleasure to put together, but for me two weeks is, well, unheard-of!

### ***Reality Intrudes***

At this point, I realised that I have a problem. I've said that I'll do some instructing this year, but my usual Saturday morning model (AcroWot – the real one, not the ARTF) is *extremely* old - about 8 years, maybe more - and a bit tatty. In fact, not to put too fine a point on it, it's on its last legs. And if I need to be able to recover someone's model from a dangerous position (and ideally stop them getting too far into trouble), I need to be practiced, so I need a something to practice with.

Now as it happens, I bought myself a Warbirds Replicas Lavochkin La7 as a Christmas present, it's all foam parts and sheet sides so it shouldn't take long to build. I've sorted out the colour scheme from several conflicting sources and got all the bits, and was looking forward to it. So the plan was that I'd clear the peanut BA-4B away, shove it in a box and make a start on the Lavochkin...

Except that I couldn't do it!!!

I tried really, really hard to rationalise that starting the La7 is the most sensible thing to do, and even noted that Dave Orrells who's now working overseas for several months with no means of building anything would really like to see how the La7 goes together because he's also got one, so I should really start a build blog as soon as possible, and finally reminded myself that the AcroWot that it's replacing is really, really on its last legs, but none of it worked.

I absolutely must finish the Andreason. The urge to finish what I've started is now really quite pressing.

So, all of a sudden I seem to be a reformed character; I no longer seem to be capable of starting and stopping projects on demand. I've got to finish what I've started, and all this seems to have happened because I've built a few stick-and-tissue rubber scale kits – no Psychiatric help required!

It's a very strange feeling. And quite unsettling.

However, it's also actually quite distressing - what am I supposed to do with all these part-finished projects from the past 25+ years??! The existential anguish occasioned by going into the loft and making a list of what I've got is now really quite severe...

## Members New and Old



*Peter Emanuel FPVing on New Years Day*



New member Eugene Fontava claims to be Suave, debonair, extremely handsome, enjoys driving his Ferrari, and flying his Lear jet to Monte Carlo every weekend.

Not sure I *completely* believe that, but he's been flying for 40 years and has an A certificate.



Nick Hoare is also new member, say hi if you see him at the patch.

## Dates for the Calendar

Here are the next few WLMAC events for your Calendar:

Date	Event	Location	Description
Thursday, 9 Feb	Club meeting	Battle of Britain Club	Winter projects/Bring and Buy
Friday, 17 Feb	Indoor Flying	Vyners School Gym Ickenham	Indoor Flying 7.30-9.30 pm
Thursday, 9 March	Club meeting	Battle of Britain Club	Talk, to be confirmed
Friday, 17 March	Indoor Flying	Vyners School Gym Ickenham	Indoor Flying 7.30-9.30 pm

## Text and Pictures for the Newsletter

I'm still looking for text and pictures for the newsletter, or even a letter of complaint - don't forget that the highly desirable prize of getting to heat-seal the yellow lines in front of the main gates is still up for grabs. In fact, if we get a good letter to the editor, it'll stand a very good chance of winning the prize outright. In fact, I'm almost tempted to write a letter of complaint myself using a pen name...