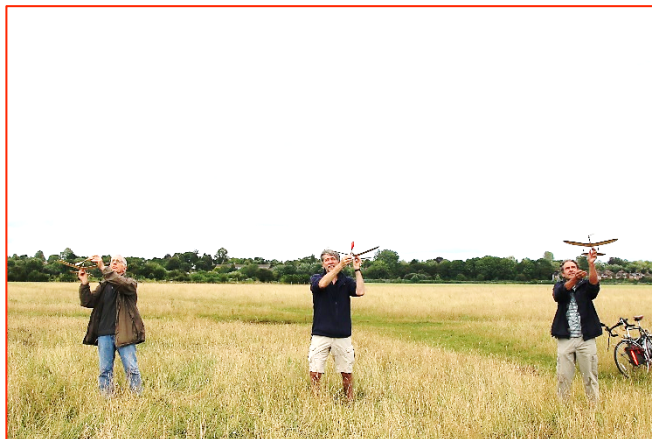


MEADOW FLYER - October 2021 The Newsletter of the Oxford M.F.C.

<https://oxfordmfc.bmfa.uk>



It's 5pm on Saturday, the 7th of August, 2021 and out on Oxford's bright but blustery Port Meadow, the *26th Charles Hampson Grant Memorial International Mass Launch of Cloud Tramps* is getting under way. Actually, owing to a decidedly dodgy weather forecast, it wasn't so much a "Mass" launch as just a few clubmates getting together to celebrate the occasion. Nevertheless, four plucky stalwarts – Simon Burch, Gary Law, David Thurling (who captured these images) and your editor - were undeterred. There were no epic performances, but that wasn't really the point. Good fun was had by all, thanks to Charlie Grant.

If you're wondering who this bloke Charles Hampson Grant was, and why he has his very own Memorial Day, go to www.endlesslift.com to learn all about him.



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Chairman's Chat - Bob Lee

It's been quite a year, largely limited by the COVID restrictions which seem, for now at least, to be largely behind us. The membership has continued to grow, as, it seems, has the activity on the Meadow, both free flight and RC (and even CL on occasions). A couple of years ago, I would normally have been flying on my own; now it's generally with one or more other people, indeed a couple of weeks ago we had quite a free flight gathering of members and prospective new members. Many members are joining just to be able to fly on the Meadow but others, it seems, are joining because we have a strong contingent of 'traditional' modellers, not the case in some other clubs.

As for my own activities, I have a *Miss 35* that has been completed but unflown for far too long. With a little help from a friend, I ran up the SAM 35, Alex Phin's engine. Apart from the fact that it prefers to run backwards, we got it running OK, so there was no reason not to take the model out. Unfortunately, I didn't choose the best of days; rather windy to say the least and flying in the lea of some trees didn't give the best result. The model climbed out strongly at first but then the turbulence combined with my attempts to control it resulted in an 'arrival'. No major damage, just a broken prop and some damaged covering, so back for a bit of rework. Next time I'll choose a better day and a better location and let it fly itself until it has settled down. I did manage to get to Old Warden last weekend (19th Sept.), first time in two years. The weather could have been



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kinder (i.e. drier) but as always the atmosphere was excellent and several club members were there. David L. (editor) was having a lot of fun flying small simple models that got me thinking that this was a very good way to go (even longer build list). There have been changes at Old Warden but nothing that's detrimental to the flying, in fact the free flight area got bigger. The organisation was very good. A top tip is to book in advance – it costs £5 less and you avoid the queue paying at the entrance!

Talking of simple, my *Oxcat* catapult glider now flies, thanks to help from Alan Trinder and Gary Law. It really is magic when it does what it should do, catapults very high, rolls off the top then goes for a long, slow, relaxed tour of the Old Warden field. If you haven't built one, it's not difficult or time consuming. Trimming it is a challenge if you haven't flown this type of model before, but rewarding when you get it right. (*Andy Crisp has the gen – see below – Ed*)

Before I close, I need to remind you that the Club AGM will be held on Wednesday, November 17th. All the Committee rôles are open for re-election and I'd encourage you all to consider getting involved with the organisation of the Club.

I am standing down as Chairman, having done the maximum of three years as per the Constitution, and Gary Law will be standing down as Secretary. These two vacated roles will need to be filled. As a reminder the current Committee is –

Chairman	Bob Lee
Secretary	Gary Law
Membership Secretary	Simon Burch
Treasurer	Andy Lauder
Newsletter Editor	David Lovegrove
Member	Stuart Golodetz
Member	Phil Kilby
Member	Andy Stephenson

Be reassured, there's nothing difficult or onerous, so do please give this some serious thought. The Club needs your help!

Bob

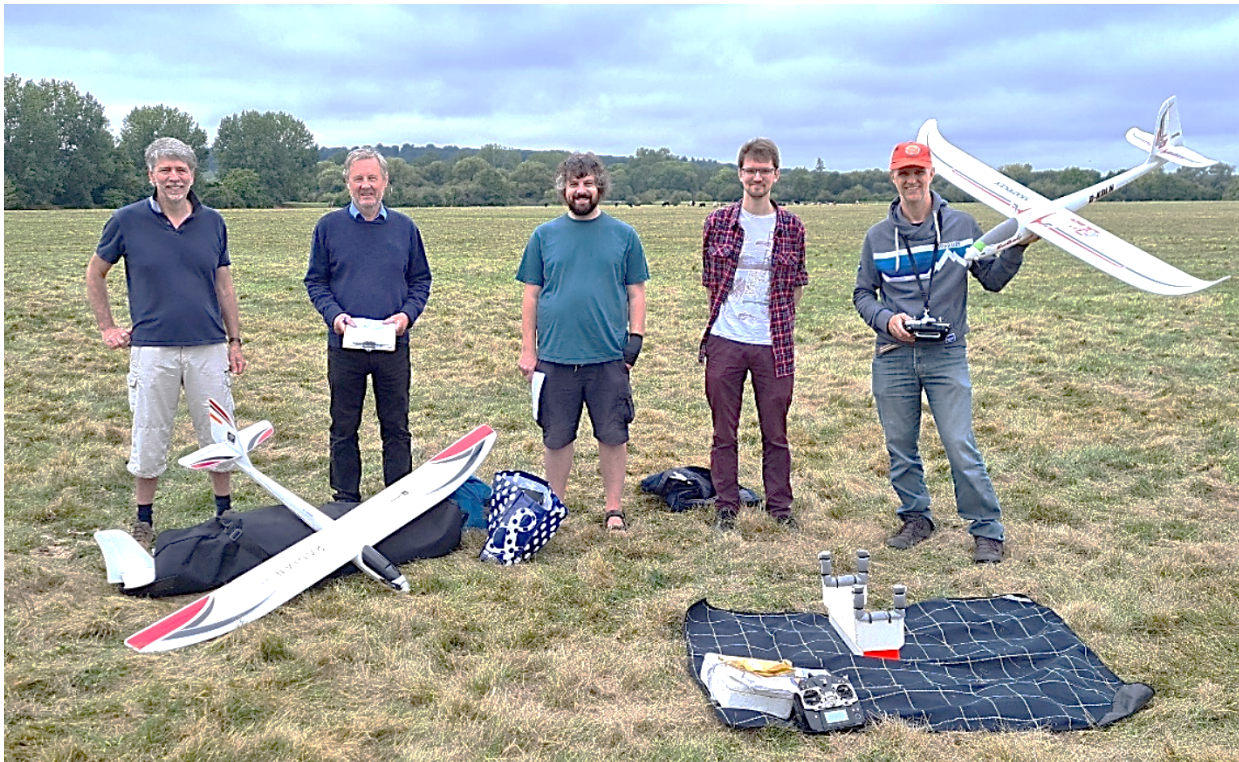
Meadow Musings - David Lovegrove

Those of you who were at the Meadow on the morning of Saturday, 25th September would have witnessed something truly remarkable – the successful completion of no fewer than **FOUR** BMFA Achievement Scheme tests by OMFC Members! I think it's true to say that this has never happened before in our Club's history and may never happen again. So, three big cheers for the happy, victorious candidates. They were: Stuart Golodetz, who gained a *Camera Drone Basic Proficiency Certificate* (BPC). Unfortunately, his drone's auto-stability system couldn't be switched off, which sadly robbed him of a full "A". Also Richard Cowan and Marcos Lameirao, both of whom passed their "A" Silent Flight (Electric) tests and, finally, Simon Burch, our genial Membership Secretary, who passed his "B" Silent Flight (Electric).



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Gentlemen, we salute you.



And here they all are, L. to R., Simon (Radian Pro), Andy Stephenson (BMFA Examiner), Stuart (Mavic Mini 2?), Richard (Phoenix 2000) and Marcos (Multiplex EasyGlider)



Changing tack, but still down at the Meadow, Alan Trinder recently emailed me with a couple of old photos he found amongst the effects of David Manners, a late schoolfriend and former fellow modeller and sometime OMFC member.

The quality isn't great but judging by what I think is a "Panic" stunt biplane visible in the centre, this grainy image probably dates to somewhere

around the 1970s. I think there are more on the right in the far background, and could that be a *Junior 60* in the foreground?

The RC contingent was clearly very active back then! And no animals in sight . . .

At the Meadow again, on a breezy morning towards the end of August, Club Secretary Gary Laws and I had the pleasure of hosting a pleasant morning's flying and lunch with American

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visitor Robert (Bob) Hauk and his English partner Bel. Both were flying tiny 15" span rubber FF jobs called the *Little Mike*. Despite its diminutive size, this model flies remarkably well and inspired both Gary and me to build our own versions.

The couple later went on to the Freeflight Nationals at Salisbury Plain, where Bob campaigned his *Gollywock* vintage rubber job in Mini-Vintage. He subsequently reported: *"We had a very good time at Salisbury Plain. I lost my model on the first official flight on Saturday, due mostly to a 3.5 minute fuse when it should have been 2 minutes, and the fact that I didn't think I could see that plane beyond half a mile. One of the guys on the field loaned me his GPS, we set up the bearing and he put a waypoint out 6 km so I had a way to find the line out on the field. We walked out there and the plane was within 50 feet of the predicted landing point.*



With the plane back in hand I flew Mini Vintage on Sunday and was doing well until on the third flight I made an amateur mistake on the launch and had a short last flight. I was the tide that lifted all boats at that point. I had a great time overall, the scenery there is really beautiful this time of year, I met a good group of fliers. I will want to come back for more in the future"

No cigar then, but Robert and Bel clearly enjoyed the



experience.

Notes On Catapult – Launched Gliders (Andy Crisp)

Your esteemed editor has asked me to write a few tips on catapult-launched gliders. I hardly know all the answers, as is shown by my competition results, but I have made (and lost) quite a few.

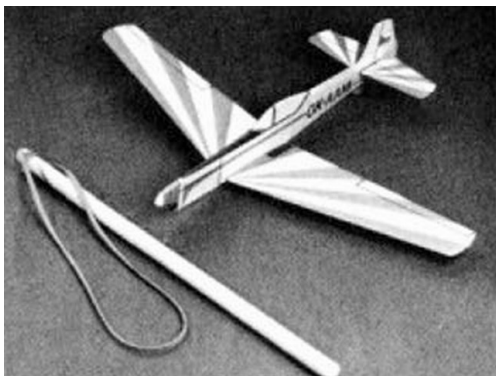
Why catapult gliders? Don't confuse the genre with hi-start or bungee-launched gliders: we are talking about small chuck-glider type jobs launched by a loop of ¼" flat rubber strip, weighing 2 grams, attached to a 6" dowel handle.

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In BMFA competitions they are often flown alongside regular H.L.G.s (hand-launched gliders) or, in recent years, tip- or discus-launched gliders. One might think that the latter might dominate but a good “catty” job can stand up to other types. No great muscle power is needed, just the ability to stretch a bit of rubber and aim the model in the right direction.

Loads of plans have been published for CLGs – even in our own *Meadow Flyer*. May I modestly mention “*Oxcat*” (see photo P.8 below) and, earlier, the “*Meadow Mite*”? The optimum size seems to be around 14” wing span. Bigger jobs are rather sluggish on launch. But then smaller jobs can lack in gliding ability . . .

Make sure that when you make your chosen model it is STRONG! After all, you will probably be hitting the ground (the Meadow’s long grass) a few times whilst trimming. For beginners, strength (the model’s, that is!) is more important than light weight. This can come later.



I glue the flying surfaces to the fuselage with cyano, pre-cemented with *UHU HART*, or what-have-you (i.e., any good, old-fashioned balsa cement). Then, more importantly, make radiused fillets each side of the joint with 5-minute epoxy (Araldite, etc.), smoothed in with a wet finger.

Insert some lead into the nose to establish the Balance Point (C.G.) but not too much, as you’ll need to allow for

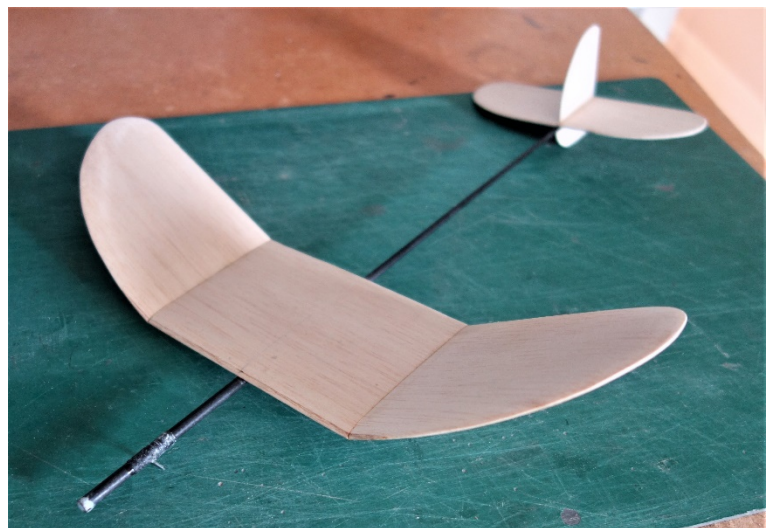
Bill Hannan's Akrobat (1971) adding or subtracting Plasticene or BluTack

later, when flying.

Plans usually quote zero incidence difference (longitudinal dihedral or decalage) between wing and tail (i.e., 0/0). I tend to glue on the wing with a shade more incidence, say 1/64” (0.4mm), just to be sure of pulling out of trimming mishaps!

Pre-flight adjustments start in the workshop/kitchen/bedroom – wherever you build – during assembly of the model. It’s absolutely no good taking it out to the flying field, catapulting it up and “seeing what happens”. You need a plan of action. Like this:

1. Firstly, if you are right-handed, hold the model in your right hand and the catapult in your left. The model should climb to the right and glide to the left. Obviously, if you are left-handed, you reverse everything.
2. Rather than using just rudder to get the turn for the glide circle, use a combination of rudder and tail-tilt. Squeeze the last 1/4” (6mm) of the fin say, 1/32” (0.8mm) to the left side.
3. When you glue on the tailplane, make sure that the left tip (looking forward from the tail end) is about 1/8” (3mm) higher than the right.



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4. Along the trailing edge at the dihedral joint on the left wing glue on a small “Gurney Flap”, that is, a piece of balsa strip $1/32$ ” x $1/4$ ” (0.8mm x 6mm), 1” (25mm) long for wash-in effect. This pushes **Andy’s 11” w/s Oxcat** the model in the right direction on the climb and stops it spiralling in to the left after a bad pull-out.
5. The Balance Point (Centre of Gravity) should be around 50% of the Root Chord but start with it at 60%. It’s easy to add noseweight to bring it forward, if necessary.
6. Lastly, don’t forget to write your name and address somewhere on the model. Even a small catapult glider can fly away if it hits lift. Maybe we can talk dethermalisers in another article?

Now to the field! You need quite a lot of space to fly a high-performing catapult job, so I’m thinking Port Meadow, rather than Begbroke Village Hall’s playing field. Let the day be calm and try a few test glides into whatever wind there is. Don’t throw too hard. Try to push the model into its glide mode (i.e., to the left).

There should be a left turn evident. If it persists in stalling add a bit of weight to the nose. If it dives, don’t change the weight but tweak the trailing edge of the tailplane up a bit. Lick the balsa and gently squeeze the wood!

Now’s the time to get the catapult out. Make sure there is nobody in the firing line and aim into the wind. Stretch the rubber about halfway and release the model with extra right bank. Ideally, it should cruise up, flatten out and swing into its left-hand glide circle. Over several flights, gradually increase the power, i.e., more stretch.

Lots of things can go wrong!

- If you launch with *left* bank, or out of the wind, the model can “wing over” straight into the ground. Launch with more right bank!
- The model can go straight up, not make the transition into the glide at the top, and dive straight down again. Maybe you’re not stretching the rubber enough to put it into its flight path? If it survives, tweak in the “up” elevator with perhaps a little left rudder to kill the resulting stall and launch with more of a right bank. This should introduce a slight spiral to the climb pattern.
- If everything is okay with the launch and pull-out, but the resulting glide is too open, try pushing a couple of pins into the left wing tip. If it’s too tight, try the right wingtip.

It’s quite an absorbing task getting a catapult job to glide properly but good, simple fun working at it over many flights.

A final tip: if you fly over long grass, e.g., the Meadow at the moment, spray the wingtips with bright day-glo paint to help you find your precious plane. Think of the exercise you’ll have chasing after the thing – have fun!

Continuing the CLG theme, your editor discovered this piece, written sometime around 1957 by Curtis Stevens of China Lake, California. He gave the following sage advice to aspiring HLG champions . . .

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“For a good launch you need three things:

- 1. The right mental attitude; make yourself think that you can throw **HARDER** and **HARDER**. This is always good for another 25 to 30 feet. More records are set by this than all other things put together. This always makes the difference between first and second place.*
- 2. A good glider. As far as I know there are only about three good ones around, Foster’s, Dagand’s and mine. Workmanship makes the big difference. But most of all . . .*



- 3. Good physical shape. Do push-ups until you can do 50. Then start swimming, at least five miles a week to lengthen your arm muscles. At the same time keep doing the push-ups, but only 25 at a time, and do these 25 as fast as you can. About three months before the meet, start throwing tennis balls for an hour or so a day. It is with the aid of the tennis balls that you really develop a launching technique. If this sounds like a lot of work; it is. But if you want to do over 1m 20secs indoors, you just about have to do all of this.”*



Phew! False modesty was clearly not one of Curtis’ faults! – Ed.

A change of pace now, as **DAVE SMITH** reflects on his experience of using the OpenTx operating system employed by RC equipment manufacturer FrySky in their “Taranis” range of transmitters.

Here are my thoughts and experiences of owning a Taranis Tx for the last year. I should include a few notes about my background, which may or may not be relevant to my approach to an Open TX radio.

I am not a technically-minded person; most of what little technical knowledge I have has been gained through my long involvement in R/C modelling. My first radio (photo below) was an ABC Mini-Sonic super regen with a rubber powered escapement, rudder only.



I first bought a computer radio sometime in 1980s, my first was a Futaba Field Force 7 (photo below Left), which I found fairly straightforward to set up and to adjust on the field. I later bought the ‘Super’ version as that had the bonus of 4 model memories. I moved through the FF 8 & 9 radios over a period of quite a few years, and found it took a little time to get used the system used on each one, but they were usable radios and I

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enjoyed using them for many flights over several years. My FF8 eventually started to fall apart through hard usage, but it took years to reach that stage.

When I decided to return to model flying a year ago, I initially used a FlySky 6 channel radio (below R) that I had bought for use in model boats, but found the light weight and slim transmitter didn't inspire me with confidence when used to control a flying model (not that I had any problems with it at all).



*Influenced by a friend who
is very enthusiastic about
Open TX, I bought a
Taraxis Tx . . .*

Luckily, he strongly recommended that I also bought the manual, as without it I would never have got anywhere with it. To my mind, the Open Tx system is not in the least bit intuitive to use for a non-computer-minded person, such as myself. On the other hand, I have met Open Tx users who do have a computer background and they seem to find it easy and straightforward to use. I disliked the idea of setting everything on a virtual Tx on my computer and preferred to input everything directly into the Tx. I managed to back up my models and update the Tx & Rx software via my computer. Neither process seemed easy, though.

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The radio is definitely very flexible: anything can be mixed with anything and there are far more options available than I am ever likely to use. I have set up 3 or 4 models on the Tx. The first was not easy at all, but once I got something working the way I wanted it to, the next models were much easier. I have taken the Tx and models to the field three times. On the first two, I was unable to fly due to things I had overlooked in the radio set up and was unwilling to fix/bodge on the field. On the third visit, the radio worked as it should, but I had only one flight as I was struggling to see the model clearly in the air. I landed hard as I had to look at the Tx to identify the engine cut switch, not a good idea on finals.

Originally, I was planning to fly electric flight only, and bought the Taranis largely because of the telemetry, which I found fairly simple to set up. After a few electric powered flights I changed back to glow, so the telemetry is no longer important to me.

At the moment, I am unable to fly due to eyesight problems and my interest in flying has dropped to zero. Hopefully, when my eye troubles have been sorted out by the Oxford Eye Hospital, my enthusiasm may return. I suspect I will not be keeping the Taranis though, as it is too complex for me and many of its features are no longer of any interest to me. If my enthusiasm doesn't return, I won't keep it either as it doesn't make a particularly attractive ornament!

In summary, I am of the opinion that *OpenTx* is a good system, but that the learning curve is very steep for non- engineering/electronics people such as myself.

Dave Smith davesmiththor1@icloud.com

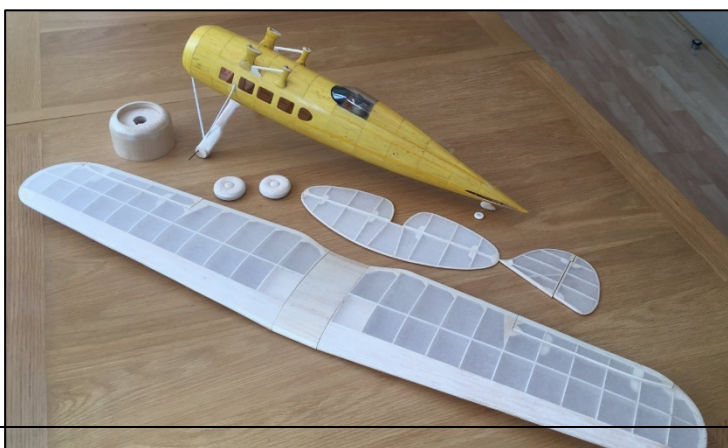
Painting and Finishing My TWA Consolidated Fleetster – Mike Stuart

It was intimated by the editor that MF readers may be interested in a few more details of how I finish my scale models using a cheap and cheerful airbrush and quite a lot of decal sheet, mostly painted and cut out into various shapes. I intend to go into quite a lot of detail, so I hope it doesn't get too tedious. At least on a computer it is easy to scroll on through quickly to the end! I will use the example of my recently completed 37" span rubber powered Consolidated Fleetster in TWA markings.

Making a start Here (below L) are the main components covered and ready for painting.

The fuselage was covered with yellow Esaki, purely so I could easily see if I had missed any

areas. Flying surfaces are covered in Martin Dilly's Japanese tissue, which doesn't shrink as strongly as Esaki, so less likely to warp the tail surfaces. Two coats of banana oil were brushed on after steam shrinking the tissue.



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All areas of the model that were to be red were given an undercoat of semi-gloss white enamel (below R.) to give an even base colour and increase opacity once the red was sprayed on. My current favourite paint thinner for enamels is *Revell Color Mix* – much more expensive than white spirit, but worth it, I think.



Airbrushing was done using a cheap single action Chinese Badger 350 copy no need for anything fancy for jobs like this. My compressor is

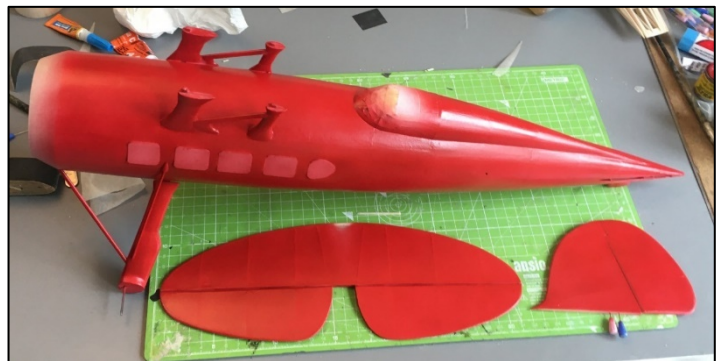


also a fairly cheap one bought off Ebay, but it does have a tank, which I think is important, to remove the pressure pulses you

can get without one.

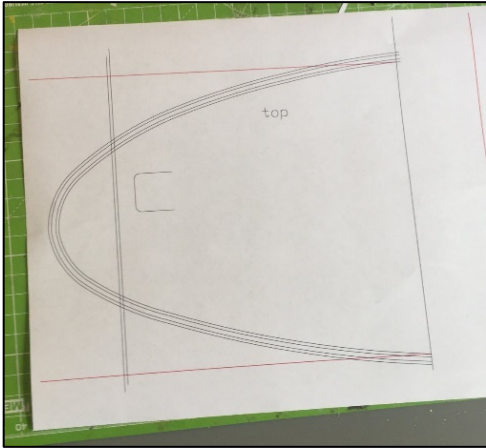
I wanted to mask off the cabin window openings to prevent overspray getting into the fuselage and up inside the pilot's canopy and decided the simplest way was to cut plugs from scrap balsa that fitted tightly into the apertures. This worked well, and I left them in place until the red top-coat had been applied. The canopy itself was masked using *Tamiya* masking tape. This is really good stuff, if rather pricy. It looks very similar to the Frog brand low tack tape sold for decorating, which also works very well. Worth picking a roll up if you see it.

The next day *Xtracolor* gloss insignia red enamel was airbrushed over the white, building up the layers gradually until the required colour intensity was obtained. Note the soft edge at the front – I didn't mask here as this would later be painted silver.



So, now to the trickiest bit – masking the curved border between the red and silver areas on the fuselage. I developed the shape in my CAD program, though it could be done manually as well. I started with a side view and guessed what happened at the top and bottom. Then I printed this off, cut out the shape and tried it on the model. It was way off of course, so the shapes were adjusted, another print made and tried the on model again. Still miles out, so try again. Repeat as often as needed – seven attempts before I was happy. The beauty of CAD is that you can print off the exact pattern as many times as you like and you can easily do a mirror image for the other side.

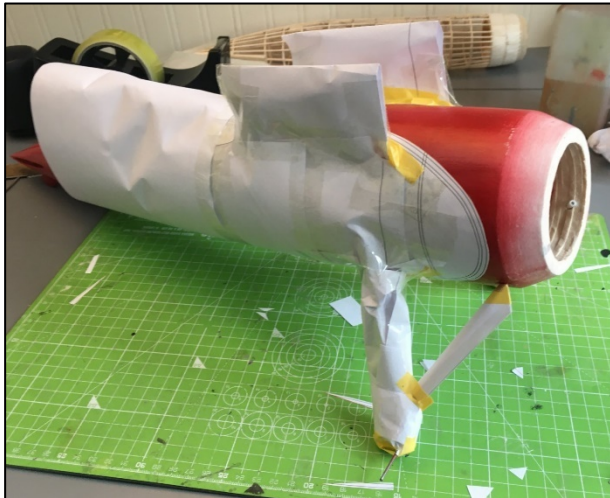
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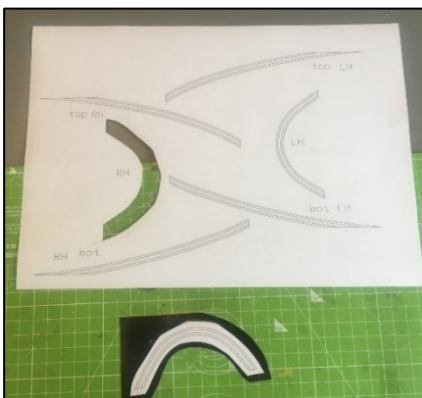
This was the final artwork (above L) – the red lines correspond to the upper and lower centrelines of the model.

Note part of window opening drawn on and used as a register. Once the shape fitted OK and looked correct the same patterns could be used for the masks and for cutting the painted decal sections.

So, before spraying the silver, the masks were applied using restickable glue stick, then backed up with lots more paper to protect against overspray. This was rather time-consuming, as you can see here!



After spraying a coat of Xtracolor RAF High Speed Silver the masking was carefully removed to reveal this. (Above R.)



The same artwork shown earlier was used to create patterns to cut sections of gloss black painted decal sheet for application behind the silver/red demarcation. I used three sections per side to save struggling with very long pieces of decal sheet. I decided the easiest way to do the black/gold/black stripes was to apply a wide black stripe first followed by a thinner gold stripe which was fiddled around to sit exactly in the middle of the black stripe.

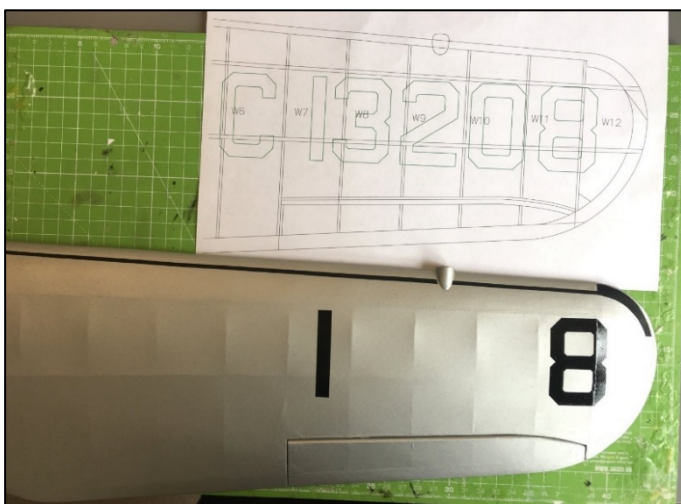
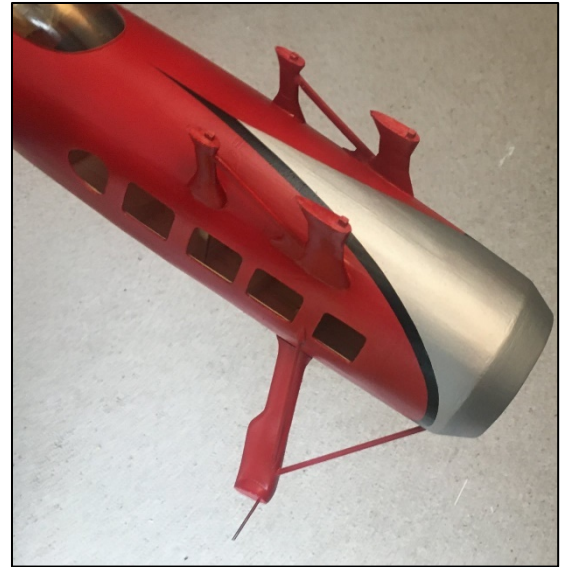
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When cutting the decal sections you only need to cut through the paper pattern and into the surface of the decal sheet, not right through it. I use *Sunnyscopa* brand laser waterslide decal paper which is tough, flexible and adheres well.

Here I is the next upper section applied, being careful to get the pointy end lined up on the model centreline.

A lot of progress shown in this photo (Below R.). With all the black decal stripes applied, the first gold section has been added. The TWA lettering was applied using black decal sheet first, followed by the gold centres, which were positioned to give a black outline of regular thickness. I found a sheet of commercial gold decal in my box which I used for this rather than painting my own, and I really like the shine it gives. Again, the use of CAD made it relatively easy to generate the shapes of the letters – the offset function being particularly useful. Plus easy scaling to do both sizes of lettering.

The wing markings were rather simpler to do. First an A4 sheet of clear *Sunnyscopa* laser decal film was sprayed in gloss black and a sheet of white decal paper sprayed in insignia red, to match the fuselage colour. Using white paper makes the red brighter. I also brush painted a section of clear decal sheet with matt black enamel so I could cut some thin strips to outline the wing leading edge sections.



numbers in the middle, using a ruler as a guide to check everything is lined up correctly (R). You will also see how I have applied a strip of matt black decal to mark the outline of the black leading edge to save me having to mask it off by applying tape to the silver paint (which can

The wing was airbrushed in Xtracolour RAF High Speed Silver enamel. There are two sets of black registration letters to be cut from decal sheet and two "TWA" titles in red for the opposite wings. I find it helpful to overlay the artwork for markings onto the model plan if I can, then print off a paper copy to act as a positioning guide. Knowing how the individual numbers and letters sit in relation to the wing ribs and spars is very helpful. On this photo you can see I have applied the first and last numbers first using the printed section of the plan as a guide. Once these are correctly positioned, it is relatively simple to fill in the



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leave a witness mark). When the decal strip is dry, the rest of the black is simply painted in with a brush. The curved section at the tip is also cut from decal.

The rest of the letters and numbers have now been applied using a ruler to check alignment.



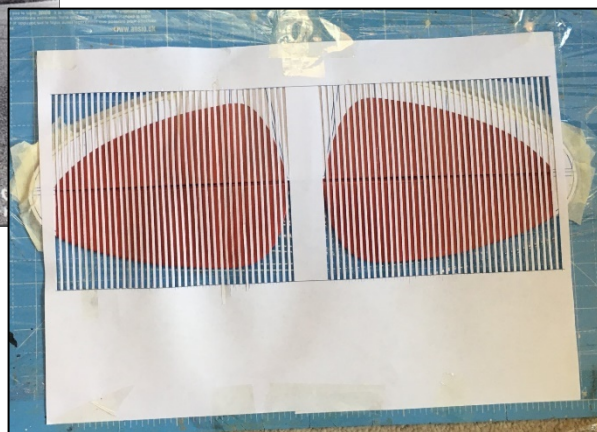
The Red TWA titles are applied in the same way using letters cut from the painted red decal sheet. The black leading edges have now been brush painted up to the decal strips.

One distinctive feature of the Fleetster that caused some head scratching was the corrugations on the tail surfaces, as seen on the photo below.

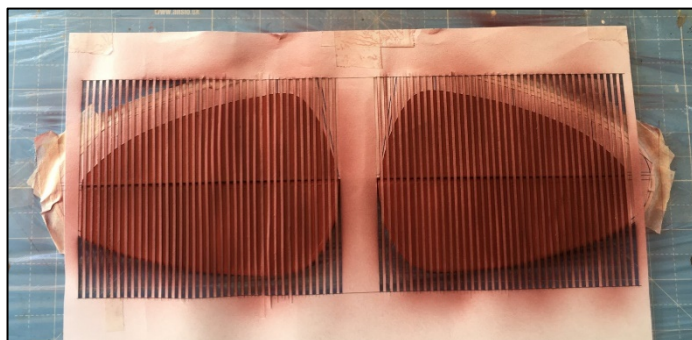
I decided to try a method I had used before, although on a much smaller model, using paper masks laid over the areas that were corrugated.



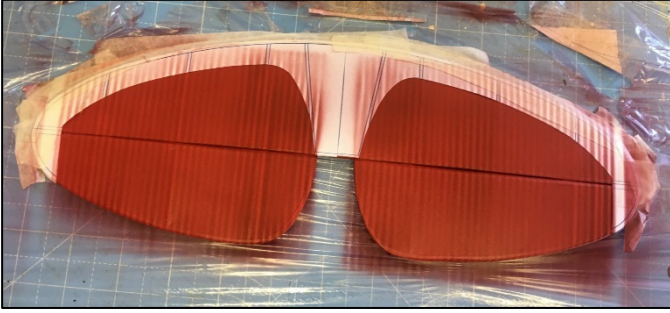
The smooth areas at the front were first masked off with notepaper attached with repositionable glue stick. The paper mask with all the slits cut in it was something of a challenge to do using a sheet of A4 notepaper, a sharp scalpel and a steel rule. The tailplane was taped to the board, and the mask placed over it, not actually attached to the part.



Here (below R) a darker shade of red has been sprayed over the mask. Not attaching the mask to the part proved to be a mistake, as the long thin strips of notepaper were easily blown away from the surface during airbrushing, allowing paint to creep underneath. If I did it again, I would have sprayed a little 3M repositionable adhesive onto the underside of the mask so it stuck to the tailplane surface. Also, the darker red wasn't sprayed as evenly as it should have been.



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tailplane upper surfaces and both sides of the fin. By the time I had done this, I couldn't face doing any more, so left the tailplane undersurfaces as they were! This was the final result (Above R). The black markings on the fin are home-made laser printed decals. Here is the finished model awaiting its first flight. I decided not to add the tall aerial mast seen in the earlier photo to the wing centre section until I have the trim fully sorted.

As you can see above, the result was rather disappointing. So, what to do? Rather than re-mask the lines and repaint, I chose the rather long-winded route of applying strips of red decal over each of the lighter stripes (I had spare decal sheet left over from the TWA lettering). This was extremely tedious! On the plus side, the decal strips gave a nice 3D effect to the corrugations. I gave this treatment to the



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Thanks to Andy Blackburn for these flying photos below taken at Port Meadow on 6th September in wonderful, calm and sunny conditions.

Drop me an email if you have any questions or comments to ffscale@googlemail.com

Get It Down! (Or Save Yourself The Trouble Of Reporting A Fly-Away)

Some (about 30) years ago I nearly lost a *Senator* at Old Warden on its first trimming flight with only 200 turns wound in. I spent the best part of an hour clambering over fences to get it back.

Having moved to another part of the country where I can now carry on my love of free flight I built another *Senator* and also a P.30 (the kit for which had been knocking about also for the best part of 30 years). I tried a "Silly Putty" timer on the P.30 (no pylon, so I mounted it on the fus) with not a great deal of success, and also a Tomy timer on the *Senator*. Both of these involved holding the wound motor whilst setting the timer with one hand.

I did some investigation into radio DTs but they seemed to be really expensive. In the USA you can get an electric band burner but the price is US \$53, plus duty and postage when importing. Again, far too expensive.

Browsing a social media site I came upon a message from a guy named Melih Karakelle, in which he enquired as to a possible market for a radio DT. This seemed the answer and, on enquiry, he told me the price would be about £25.00. Seemed too good to be true!

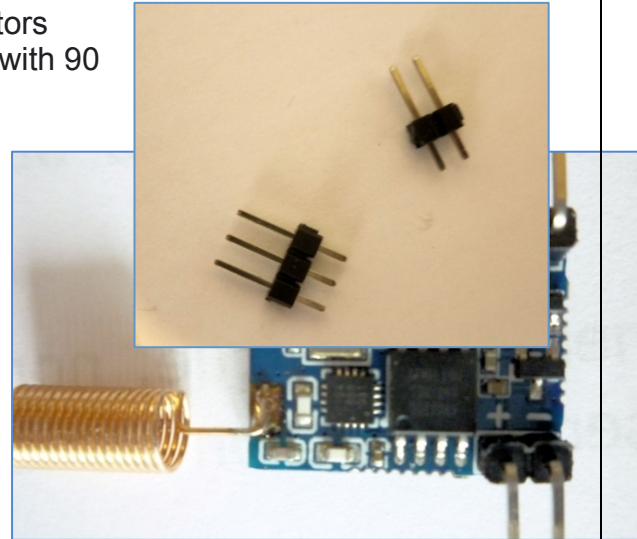
Meadow Flyer

I expressed an interest and some weeks later up he popped again to say that the units were ready for the market. I bought a transmitter and receiver, a band burner and a separate timer/band burner. They came with a selection of connectors to be soldered to the units. The connectors are 2 or 3 pin as the receiver will operate a servo as well as the band burner.

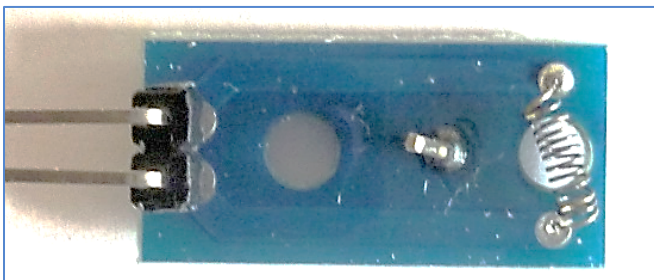


The standard 1.5mm connectors supplied I also include some with 90 degree bends.

I am installing the timer/band burner in the P.30 and the radio d/t in a Vic Smeed *Cherub* as I ended up chasing that across Middle Wallop and those that have been there will know how far that can be! I don't intend to repeat that at Port Meadow (I'm too old for that). Binding the



transmitter and receiver is easy; just hold the red button on the receiver and connect the battery, touch the button on the receiver and it's done. I connected the receiver to a small LiPo, pressed the transmitter button and it worked, a nice bright red glow on the burner wire. The receiver unit I has a 2-pin connector for the battery and a 3-pin connector in case you want to use a servo d/t.



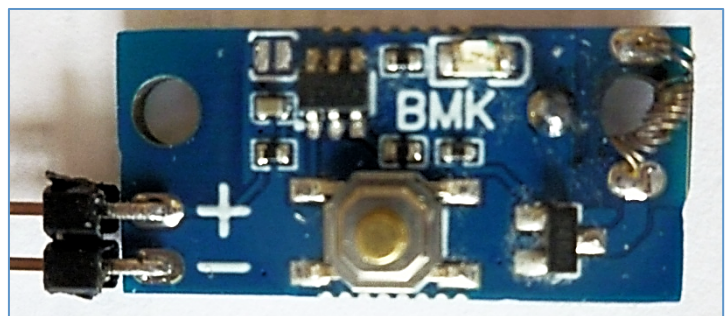
The connector for the simple burner board is on the left. The DT band hooks over the pin and across the coil

Setting up the timer/band burner was also simple. Hold the programming button and attach a battery, release the button and its ready for setting the time. The delay is set by pressing the button and counting the number of flashes on an LED, one for every second up to a maximum

of 250 seconds. I've set mine for 2 minutes as I reckon my P30 can get a long way away after that. To set the time running simply hold the button for 2 seconds and its running, after two

minutes I got another nice bright red glow from the burner coil..

The ranger of the Transmitter is claimed to be up to 2750 metres, if any model of mine is that far away I won't be seeing it anyway. The transmitter is matchbox size and weighs 18gms. The battery is a CR2032 and should last some 5 years.



Flying Weights (Grams)

Radio DT:	Rx with connectors	2.34
	Band burner with connector	0.74
	130mAh lipo	4.84
	Total weight	<u>7.93</u>

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Timer controlled	Timer/burner	1.28
	130 Mah lipo	<u>4.84</u>
	Total Weight	<u>6.12</u>

As a comparison I weighed my Tomy timer and it came to 5.13 grams, I figure the difference in weight on my Senator (less than a gram) will make no difference whatsoever.

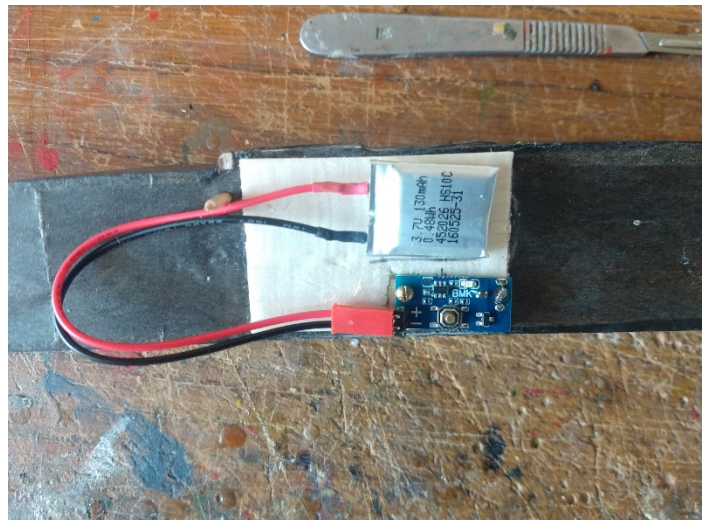
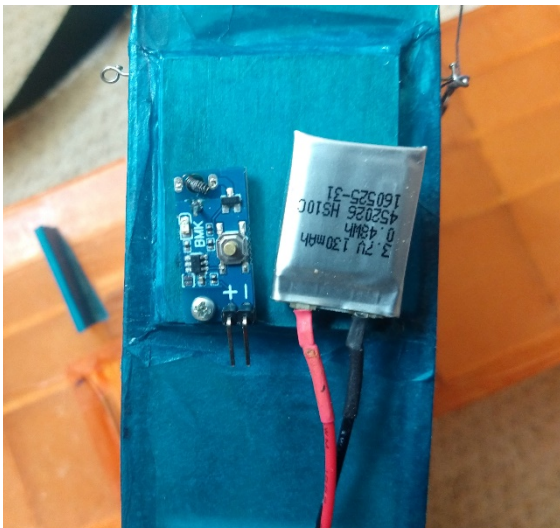
Melih also supplies

1. a Servo/ESC timer that changes the position of a servo arm once the countdown ends or, in the ESC version, starts the motor when the button is released and stops it when the countdown ends. This controls the run-time of a Brushed or Brushless Motor via an intermediate Electronic Speed Controller (ESC)
2. a Motor timer which can drive a 1s LiPo-powered brushed motor @ up to 5A.
3. An E.20 timer to power and control the length of the motor run, plus a separate timed band burner for DT operation.
4. A simple charger for UMX-type single-cell LiPos

Prices at the time of writing are:

Tx and Rx Combo	£25-99
Band burner board for use with Tx/Rx	£2-49
Combined E.20 Motor Timer/DT Band burner	£14-90
E-Timer / Band Burner	£9-90
Micro Charger for single-cell UMX-Type LiPos	£4-90

Photos (below) of the Timer/burner attached to both my Senator (blue fus) and P30. The installations would have been a lot neater had they been done during building rather than retrospectively. Weight difference with Senator is de minimis but increase in weight on P30 as opposed to the viscous timer is about 6 gms.



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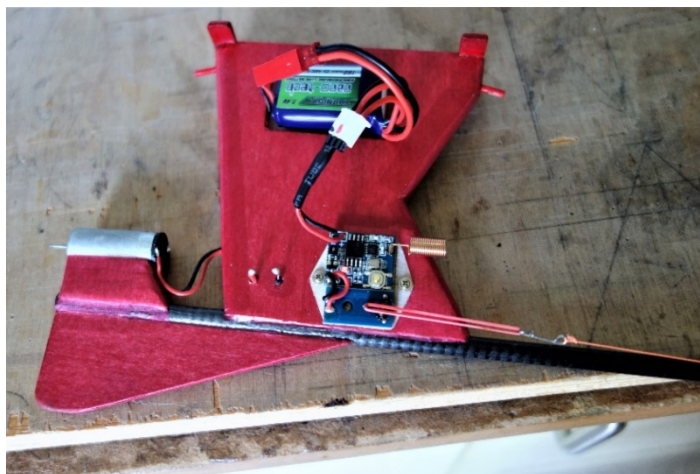
If you're interested in getting your FF models back alive, you really should have a look at the website.

<https://melihkarakelle.com/category/bmk-free-flight-store>

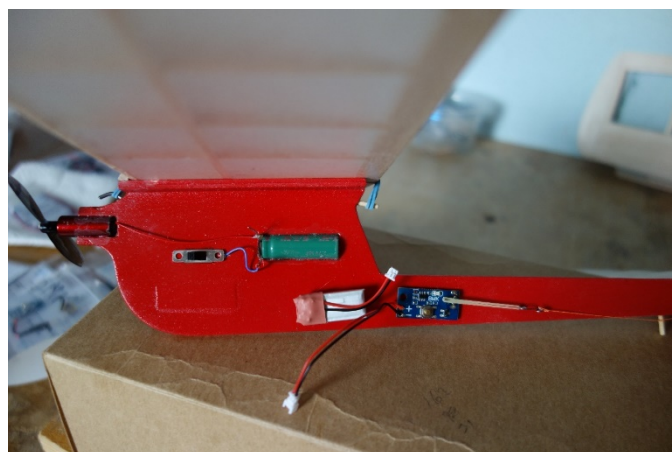
Editor's Note: Inspired by David's article, I soon had some of Melih's DT kit installed in a *Ferry 500 E.20* duration model and a capacitor-powered *Micro Stardust* (see below). At the time of writing, both await their proper maiden flights but I can't fault the ease of use and reliability of the two different installations. I'm using tiny 100 Mah single-cell LiPos to power both units, which are perfectly adequate. The photos below show how simple the set-up can be.

Although most users will opt for the standard RC-type pin headers that are supplied with the units, on the *Ferry 500* I chose to hard-wire the band burner board to the receiver. This was simply to reduce the overall "footprint" of the two units in a rather small space. It also got rid of a few bits of wiring and, usefully, saved a gram or so in weight!

I understand there will be a further review of the BMK stuff in a forthcoming *Aero Modeller*.



The *Ferry 500* (L) has the BMK RDT installed alongside a band-burner (hard-wired for reduced bulk). The Mini-Starduster (Below R)



has the BMK combined Motor Timer and DT timer/band-burner unit. Both work well. Incidentally, for a cheap source of bands, look on that auction site for Loom Bands – plentiful, cheap, and the perfect size!

All Done And Dusted

Well, that's another packed issue put to bed. I do hope that you're finding something of interest to read in these pages – if you are, some feedback would be good! Hopefully, some of you may even be inspired to knock out a few lines for submission and inclusion in the January edition?

On that point, it concerns me a little that I get very few submissions on RC matters. According to Membership Sec. Simon Burch's statistics, the two main disciplines are broadly similar in terms of numbers. But that's where it ends, as by far the majority of input comes from the Freeflighters! Whatever your model aeronautical bag, please do consider whether you can contribute something, even if it's only a few photos, or a report of your most recent crash!

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Anyway, winter is fast approaching, and it's time to start to think about building something for next season, and perhaps making a crafty note on the domestic calendar to attend the Berinsfield Indoor flying events? A reminder of the dates:

Sundays, from 9am to 4pm; **Oct. 3rd, Nov.7th, Dec. 5th Jan 2nd, Feb. 6th, Mar. 6th.**

See you at the next indoor Club Meeting at 7:30 pm on Wednesday, 20th of October.

David (Editor)