

# From the Pits

The Newsletter of the Weston Model Flying Club

January 2013

[www.wmfclub.co.uk](http://www.wmfclub.co.uk)



## Editorial

It's just the end of January and we have at least 48 members already, it seems as though people are joining in droves (in-joke).

On a more serious note, we have to be share the surrounding land with others including the Gun club, so it's important we maintain good relations with all our neighbours. Please read the article on this carefully.

Finally it's good to see more building going on these days, we have a couple of articles this time from club members building scale models.

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## Field Condition



As most of you know, just before New Year a herd of cattle escaped from the farm and made their way up the edge of our field. As the ground was already very soft from the rain, at first sight the damage looked awful, although thankfully the flying patch largely escaped. However, thanks to the efforts of a number of club members who turned out in wellington boots to 'heel in' the divots, it soon looked much better, and now after a few weeks you can hardly see what happened. The ground is of course still soft and muddy with the continuing rain, so please be careful not to stir it up too much.

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## Fun Fly League

Social Secretary **Trish Beacham** is planning a full revival of the Fun-Fly League this year, with a £50 prize for the eventual winner! The results and league table will be on the website as well as here in the newsletter.

Trish plans to start the fun fly league on the Easter weekend with an egg drop on to a target on the patch (Mike Pope's idea!) First prize will be an Easter egg with mug, second prize an Easter egg in a box and third prize will be a cream egg, but most important will be the league points toward the £50 prize.

## Mercury IV Free Flight Model

At the start of the New Year a friend who knew I was into model aircraft offered me a “partly completed model plane” which had been recovered from the house clearance of a deceased person. From the amount of ingrained dirt and brittle balsa it had obviously been there a while. There were no control surfaces and a rather strange flat-bottomed tail-plane at what seemed an odd angle, suggesting free flight despite the large size (96” span, 70” length).

The fuselage has extensive planking on the highly curved shape; the wings have an under-cambered section and are very light. One wing is sheeted but the sheeting is loose and would have to be re-done.

After a quick search on the Internet it turned out to be a Mercury IV, designed by Mick Smith in 1946 and published in *Aeromodeller* magazine in March 1953. So assuming it was built around that time, it has been in someone’s shed for almost 60 years. The plan and original building instructions are available online, and showed that the build, as far as it went, was correct to the plan.

The tail-plane shape and angle is explained by the need for longitudinal dihedral used in free-flight at that time, whereby the main wing is at a positive angle of incidence, the CG is at 40% chord, and the lifting tail-plane is at a small negative incidence giving stability in pitch, albeit with a tendency to ‘see-saw’.

The building instructions contain phrases like “cementing with Durofix”. Looking this word up on the Internet now leads to a range of power tools, but originally it seems to have been a clear cellulose-based adhesive. The preferred covering is described as “Jap silk & dope”, and the installation of a “coil & condenser” is described for the engine.

So the question now is what to do with it. A lot of work has obviously gone into it, particularly the fuselage, and it seems a shame to scrap it, but it’s not for me. It could probably be converted to RC with some effort; there are examples on the Internet of people doing similar things. Does anyone either want it or know someone who might, especially anyone into vintage free-flight? Let me know if you can help.



MERCURY IV



## Free Plans

I found the plan for the Mercury at [www.outerzone.co.uk](http://www.outerzone.co.uk) which is an excellent repository for old plans, freely available for download. There are over 3000 plans in total, mainly free-flight but including over 600 for RC. Most are old and small size, but there are a few exceptions (anyone fancy a 180inch span Sunderland?) and if you're looking to build something unusual it could be worth a look.

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## BMFA Area Examiners Meeting

After last year's successful event, this will again be held at the field, on Saturday 11<sup>th</sup> May. Anyone who would like to take their A-, B- or even C-test on fixed-wing or helis should contact **Mike Pope** or **Dave Beacham** before then. Please note that there may be minor restrictions on general flying in that no-one else can fly when a test is being taken, but this should not cause any problems.

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## Woodspring Wings 2013



Planning for this year's show, organised by Woodspring Wings and ourselves continues. Obviously we are hoping for dry weather this year, both at the show and in the spring to dry the site out.

There will be a new website specifically for the show, which is [www.woodspringshow.co.uk](http://www.woodspringshow.co.uk). This will of course be linked to from our website when it is ready.

Posters are now available as shown here, in B2, A4 and 1/3A4 sizes; let me know if you can use any in advance of the main effort in June.

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## Weston Fighter Meet Model Air Show

We have recently been notified of another show in the area, this is the Weston Fighter Meet, on the sands at Weston on Sept 28/29, and as its name suggests appears to feature mainly large warbird and fighter scale models. See [www.westonfightermeet.co.uk](http://www.westonfightermeet.co.uk) for more details.

Please note we have been asked not to do any slope soaring at Uphill and Brean Down on the days of the show. Please note this and pass it on to any non-members you know who may use either of these sites.

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## Website Improvements

The club website now has a **Noticeboard** page for announcements, items of general interest and anything which doesn't fit anywhere else. For example, messages I sometimes get from other local clubs advertising their events will be shown here. If you want to put anything on the Noticeboard, contact me through the 'Contact Us' page.

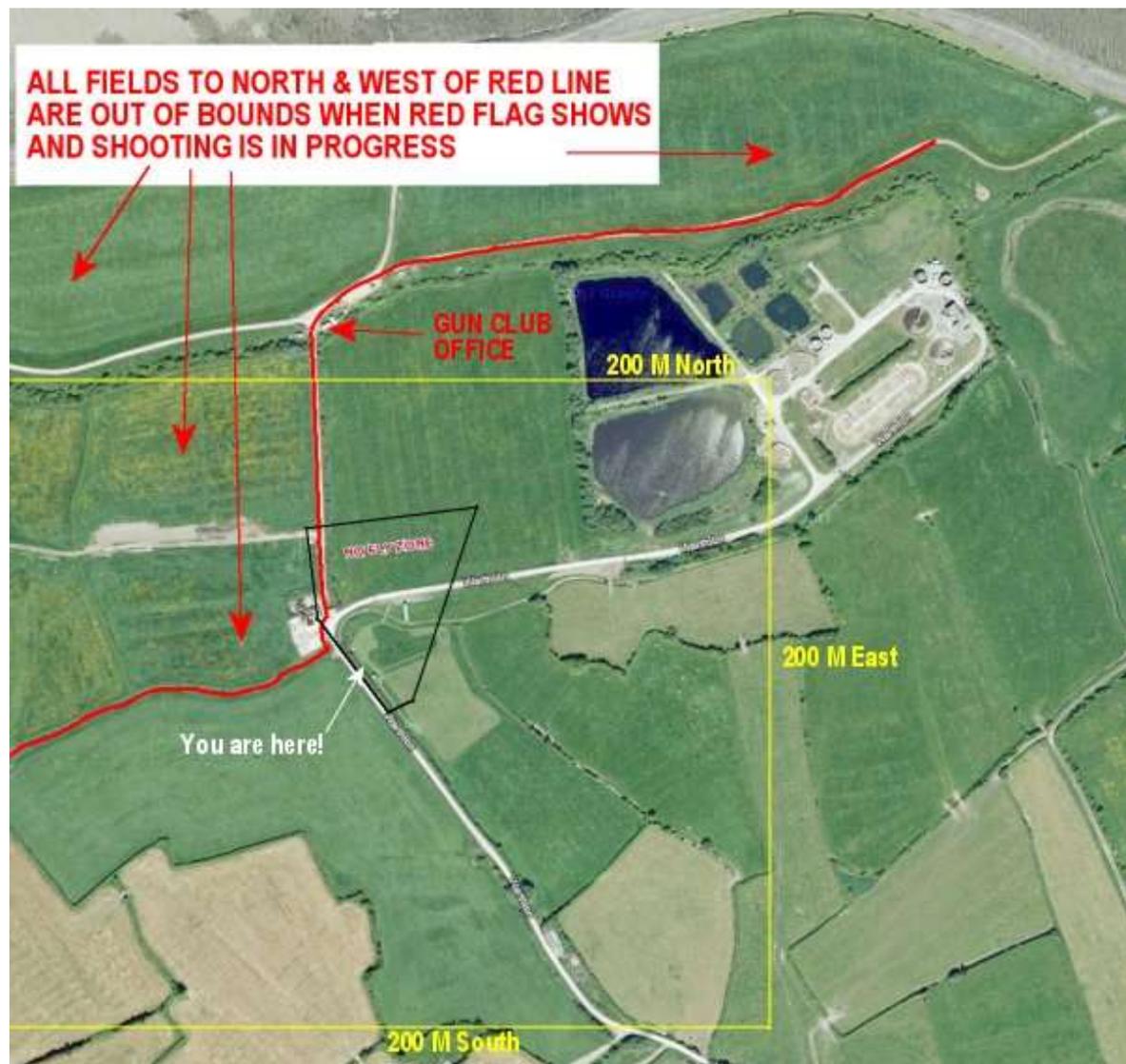
## Getting on with the Neighbours

As you all know we have a clay-pigeon shooting club (the Woodspring Bay Shoot) just to the North of us. Like all of our neighbours it's important to avoid disturbing them, and in this case where guns are in use it is vital for our safety and theirs that the correct procedures are followed.

When a shoot is in progress large red flags are flown, and these are easily visible from our field. **Under no circumstances should you enter the fields shown in the map below when the flags are flying.** You should also not fly anywhere near these fields, since if your plane goes down there, not only will you be unable to retrieve it but it could be a hazard to the shooters.

If you do for any reason need to contact the gun club, phone numbers for their safety officers are displayed on the wall in our clubhouse. If you can't contact them by phone, then walk straight down the right hand side of their lane until you reach the site office (shown on the map below), and wait there until someone attends to you. **Do not wander around the site.**

Keeping to these rules will ensure we are seen as good neighbours which is always important when we share the land so closely.



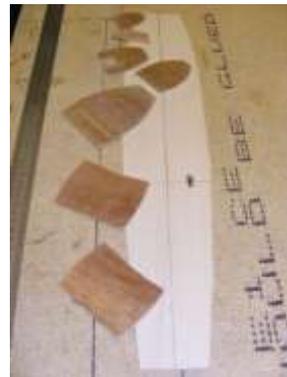
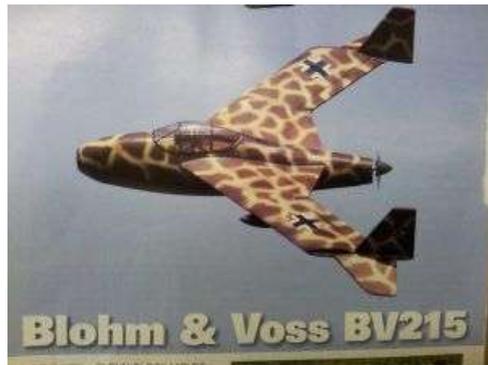
## Blohm & Voss BV 215

Hi all, I wanted to build something different so had a look through some available plans and came across the BV215; weird looking thing but I didn't let looks put me off, and ordered the plans.

They arrived and one look told me they were about as much use as a chocolate fire-guard. So after a few choice words and the habitual cuppa or ten I had a re-draw, made a few alterations and started to research the aircraft.

As most of you are aware the Germans were experimenting (with various degrees of success), with the jet engine and weird and wonderful air craft designs. The BV215 never left the drawing board (I haven't flown mine yet so there may be a good reason for that!!!) I won't bore you with other facts about the aircraft.

I went into the shed with a load of wood, a hammer and a cuppa and started to knock it up. What a nightmare it turned out to be, so many angles to get right, so much tea to drink.



But after a lot more choice words she started coming together as you can see from the photos. I have fitted an electric motor in the tail and it seems to have enough push. Just got to build a canopy and do a little airbrushing, so it's nearly done and should be ready for the spring, and fingers crossed it will fly well.



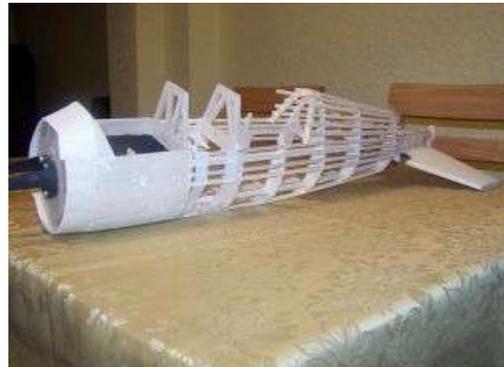
**Dave Beacham**

## Westland Lysander

For Christmas I had a Tony Nijhuis Westland Lysander plan, vac form set, CNC and wood pack. It is to 1/9 scale and 66" wingspan with an all up weight of about 5½ pounds. It is designed for an SC52 4-stroke. I have one that was previously fitted to a model that was written off a few months ago, but I won't go into that here. Construction starts with the fuselage, which although on first sight looks fairly complicated is in fact very easy to construct. It is basically an inner box section on which the formers are slid. When correctly aligned they are then glued, which then ensures that the fuselage is straight. The longerons are then added in a sequential sequence and also from side to side so that the fuselage remains straight and true.



The tail plane is made next. This is constructed in one piece and built over the plan. The spar is pinned into position and the ribs fitted. The inner leading edge and trailing edge are glued to the ribs followed by the top spar. This assembly is then removed from the plan and the top and bottom fully sheeted with 1.5mm sheet balsa. The panel is built upside down over the plan, so that when inverted the tail plane will have a very slight dihedral. The outer leading edge is added and the whole assembly is sanded to shape.



The elevators are made individually from a 3mm sheet balsa core, shaped to the profile shown on the plan. The leading edge is made from 9mm sheet balsa glued centrally to the core edge. The rib lets are then glued to the centre core top and bottom. The individual elevators are then hinged to the tail plane and joined together with a piano wire torque rod. They will be driven from a single servo via a pushrod.



I intend to finish the model as used with 138 Squadron (special duties) which was formed for use with the Special Operations Executive. They used MK111 aircraft which had a fixed entry/exit ladder on the port side to gain access to the rear cockpit and a large under belly drop tank. I will cover the whole model in black Easy coat (Profilm), with the upper surface painted camouflage. The roundels and squadron markings will probably be hand painted on. I intend fitting a 1/9 scale WW2 pilot which I got from J Perkins. This is to the right scale and once painted should look good.



One feature of the full size Lysander was that it had landing lights fitted to the wheel spats. I am toying with the idea of making these working and linked in to the flaps via a micro switch. Full deployment of the flaps will turn on the landing lights.

The next part of the build will be the rudder and fin, which are constructed in the same way as the tail plane and elevators, then onto the wings. These are a fairly unique shape and will be made separately. They will be attached using 8mm carbon wing joiners and will be held in place by the wing struts. These struts are not specifically designed to carry load but they are required to hold the wings in position and stop them from sliding apart.

**Dave Tremelling**

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## From the Workshop

### Polikarpov I-15

I described the background to my latest biplane project in the last issue. Since then work has gone steadily and all the tail surfaces and wings are now complete, with the fuselage next. The other headache has been the top wing fixing to the fuselage, with the gull-wing.



The fuselage will be made from a box-frame with shaped formers glued to the sides, sheeted over the front half with stringers on the rear half.



### Depron Super Bandit

I broke off from the Polikarpov to make my first Depron model. It's the 'Super Bandit' electric pusher-prop jet, of which there are several in the club already. **Mike Pope** has one, as do **Pete** and **Will Richards**. Power is a 2200kv motor from Giant Shark, with a 6x4 APC-type prop.



Construction is relatively easy; Depron cuts easily with a sharp knife or scalpel, and UHU POR contact glue or 5-minute epoxies are used to glue it. Carbon-fibre tubes are used to give the wing and tailplane strength.

You can find many more Depron plans at [www.parkjets.com](http://www.parkjets.com), under the Free Plans section. This one is by Steve Shumate, who does seem to do some very good models, but then his day job is as a design engineer with Boeing so he would know a thing or two about aircraft design.



## Events

Forthcoming events this year and next:

Date	Event
Thursday 7 <sup>th</sup> Feb 2013 8pm	Club meeting at the Memorial Hall
Thursday 7 <sup>th</sup> Mar 2013 8pm	Club meeting at the Memorial Hall
Thursday 4 <sup>th</sup> Apr 2013 8pm	Club meeting at the Field
Thursday 2 <sup>nd</sup> May 2013 8pm	Club meeting at the Field
Saturday 11 <sup>th</sup> May 2013	Examiners Day at the Field

## Website

Don't forget that all previous issues of the newsletter since I started doing it (back in October 2001!) are available on the club website [www.wmfclub.co.uk](http://www.wmfclub.co.uk). I also try to keep the Gallery section reasonably current with photos taken when I'm at the field, and finally don't forget the For Sale section where you can add your own For Sale and Wanted adverts.

## Club Meeting Venue



All club meetings apart from those in the summer months are normally at the **Memorial Hall**, High Street, Congresbury. If you're coming from Weston, turn right at the traffic lights, and the hall is just a few yards further along High St.

The summer meetings (April to September) are at the field at Wick St Lawrence.

## How to contact the Editor

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The Newsletter is issued (with luck!) 4 times a year, at the end of January, April, July and October. Any contributions should be sent to the editor by the middle of that month.