

From the Pits

The Newsletter of the Weston Model Flying Club

July 2010

www.wmfclub.co.uk



Editorial

The Woodspring Wings show which WMFC helped with was a great success, and has not only brought us material benefit, but has probably helped to raise the stature and reputation of the club as well. Read more inside.

Club Meetings

Just a reminder that starting in September, club meetings are back at the Memorial Hall until next summer. See the last page for the location.

I'm not sure if it's confirmed yet, but Woodspring Wings are inviting well-known and prolific modelers **Tony Nijhuis** and **Colin Hammond** to give a talk at their club meeting on Thursday 18th November. We will be sharing the expenses and hence we are also invited. Details will be on the website nearer the time.

Field Improvements

Ivan Steerment has obtained a new generator for the club. It's a Honda GX160 with a 4kW output, which should allow full lighting in the club house and use of power tools or similar. Ivan has sold the previous two small generators on eBay for a very respectable £75.



The fence has been removed during the summer, it will be restored when animals are in the field again.

There is still some discussion going on as to whether the pilot boxes will be marked with flags or with slabs, but the important thing is that pilots should stand together.

Finally work will be needed this autumn on the bridge, car park and club house. Details are still to be decided by the committee, but volunteers will be required at some stage!

Model Discounts Move

Model Discounts have moved across the road from their previous premises and are now located at 2 The Mart, Locking Road Weston-Super-Mare.

Woodspring Wings 2010 show



You all know by now that our club helped with the Woodspring Wings show this year, with Ivan actually organising it. It's not really possible to over-emphasize the effort Ivan put into the job, but this photo of him walking around Weston with a sandwich board advertising the show really says it all.

The upshot is that the show was an outstanding success, earning him and the club much praise and resulting in a share of the profits of over £3800 for our club as well as over £400 for a charity of our choice.

Ivan was particularly pleased that the raffle (run by his wife Mandy) also raised a record amount. On the next page is a letter from the raffle winner expressing his appreciation.



The show itself was blessed with good weather on the Saturday, and although it rained at the end of Sunday that was enough to attract a near-record crowd. Most of the top-name pilots were flying, with the usual spectacular displays by the likes of Steve Holland, Steve Vine, and Steve & Matt

Bishop with their formation Red Arrow Hawks.



New this year were the two Breitling Stearman models complete with RC-operated wing walker figures!



Many large models were there such as this Handley Page w10 simulating aerial refuelling.

Finally Ivan has agreed to organise the show again next year so that should be something to start looking forward to already!

Hi Ivan

"Just like to say what a wonderful day I had at the Woodsprings 2010 Show, as usual it was a well organised, fun-packed day with so much to see including the various displays; the flying was non-stop all day long, which was amazing as the weather conditions were not perfect. Winning the top prize on the Raffle was the icing on the cake!! The annual outing for the Plymouth Model Flying Club, we all had a wonderful day as all the other Clubs did as well I am sure. I will be back again next year for sure. Many thanks again Ivan"

Roger Hawkins

Plymouth Model Flying Club



Casualties

When using a large engine in a trainer with coarse pitch prop make sure you have enough bands on the wings; as **Alan Coombes** will tell you a body with no wings has great penetration through even the thickest of hedges!



My Acrowot finally met its permanent end; the probable cause was a dirty aileron plug with an intermittent connection causing the left aileron to stick fully down.

And as for the Hart here – well I was lucky to get away with a landing in the hedge after the motor mount came clean away from the fuselage in flight – probably the result of too many nose-over landings. At least it's easily repairable.



Whether(2weather) or not to go Flying?

As some of you will be aware being members of both clubs Woodspring Wings have elected to install their own weather reporting system with remote camera to “aid” the decision making process of whether to go flying or not following a presentation given by the now Chairman of Woodspring Wings, **Warren Smyth**.

Warren had found a site in the states that was a fine example of how it could be done which went some way into explaining what was required in terms of hardware and software.

For those interested here’s the link.

<http://www.arvadamodelers.com>

All that was needed now was a pair of mugs to put it all together. Enter **Paul Lathall** and myself. As is so often said, “if only we knew then what we know now”.

That was back in March. How time flies when you have problems to resolve. So fast forward months of work, 100’s of hour of investigation, testing then more investigation and more testing; we now have two working systems on soak test. One for Woodspring Wings to be installed this month and one as a development system based at my home in Hutton.

The solution basically consists of:-

1 x weather station for the collection of data. (wind, wind direction, rain fall etc) (source - USA)

1 x small form factor pc (source – far east) running a Linux programme (source - Germany) for data logging that creates FTP files.

1 x Panasonic IP camera (source - USA)

1 x 3G/4 port router (source - Eire) to transfer the FTP file and camera .jpg image to the host service.

2 x 12v Batteries (source - locally)

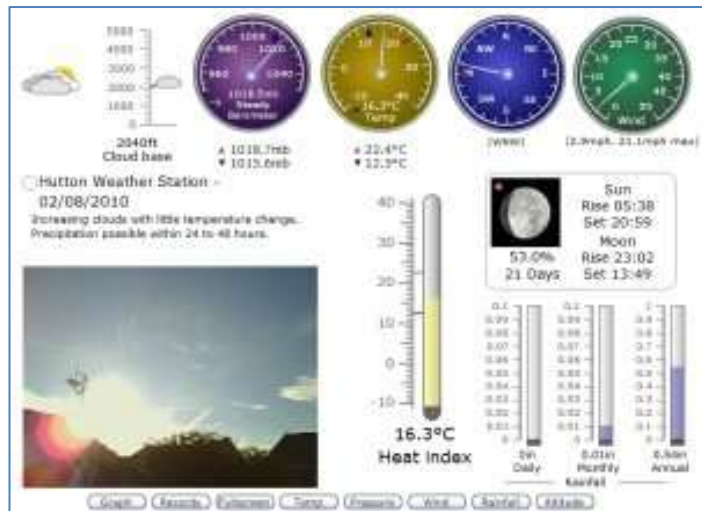
1 x 120w solar panel with control circuits to provide the recharge of batteries. (source - UK)

1 x bespoke power supply to drop the voltage to 5v and 9v to feed each bit of kit. (source – bags of bits)

Hosted web service and software to take the data and turn it into the type of graphs shown in the examples shown here, and on the following link:

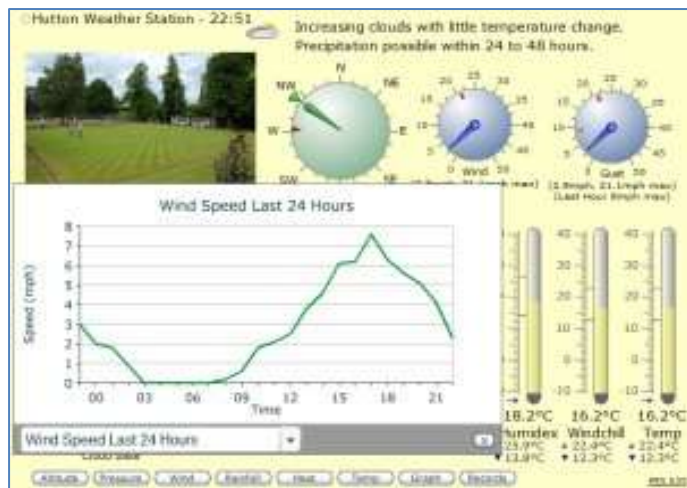
<http://www.whether2weather.co.uk>

The system currently draws (sorry for the pun) continually 1.2amp max, 24/7 as they say in newspeak. So this week we’ve been playing with



daylight switching (good old Maplins) to reduce the burden on the batteries at night, which has proved to work well at the moment.

Why the development system I hear you ask, well that's easy, we've turned what was a hobby solution into a market opportunity and started a brand called "whether2weather" as part of our **Align Solutions Ltd** company.



Still in its early days "whether2weather" is going to provide a Recreational Weather Reporting Solution to all manner of recreational clubs and organisations.

If the solution above has sparked an interest and you would like to know more, please feel free to ask either Paul or myself. And if you can think of any club or organisation that may be interested in the solution for their members outside of model flying (we've got that covered, thanks) then please pass on our details.

As a footnote if you want to pick up weather reports for Wick then here's a very good local site just down the road from the field. So no, we don't need our own system.

<http://www.wslwx.co.uk>

Happy Flying,

Alan Meaney

Landings

Thought I'd include this picture of a Puffin landing to critical appraisal from the locals, taken recently on the Farne Islands. If your landing has been scrutinised by the assembled throng in the pits you know the feeling...



Safety

Are we getting complacent again? There have been at least two crashes recently due to flight batteries not being charged, and I have to confess to a couple of incidents: My Kadet had a close shave when it started behaving erratically and turned out to have a battery wire suffering from Black-wire syndrome. And My Acro-Wot met its end from something similar (see the Casualties section). Make sure you check your electrics before flying!

From the Workshop

Despite it being the flying and holiday season, I've managed to get a bit of building done recently, mainly on the Kawasaki Ki-100 as described last issue. At the right is the box of parts as I left it 8 years ago. All the ribs, spars, fuselage formers etc. had been cut out, so it was relatively simple to get the wing started.

The fiddly bit was adding the retracts – mechanical ones here - getting the angles correct so that the legs rake forward enough to make it stable on the ground, but retract back and lie flat in the wing. This is not quite scale as the real thing had the u/c legs right at the leading edge, and it's not really possible to get the mechanical retract units that far forward, but it looks OK.

I'd have liked to do the undercarriage doors properly, and in fact I spent a couple of days getting them scale size and fitting correctly, until I realised that they would probably just get ripped off immediately on our grass strip, since the wheels are relatively small at 3.5 inches. So they will be left off at least until the plane is finished and I can judge whether it will be a problem.

Wiring for the aileron servos and lights is installed; inevitably the scale landing light position is exactly where the retract unit is, so the light will have to be moved a few centimetres inboard.

Flaps are now fitted and the wing is just about complete. Tail surfaces are also done, so the next task is to start the cowl and fuselage.

I've been using a new (for me) material in this model. It's very thin (0.3mm) epoxy sheet, known industrially as G10 and available from Mick Reeves Models under the name of Proskin. I've used it to make the flaps for both the Ki-100 and the Typhoon.

The problem is how to hold the material down flat since of course you can't pin it. The solution was to use magnets on a steel sheet. I used rare-earth magnets which are extremely powerful, in fact



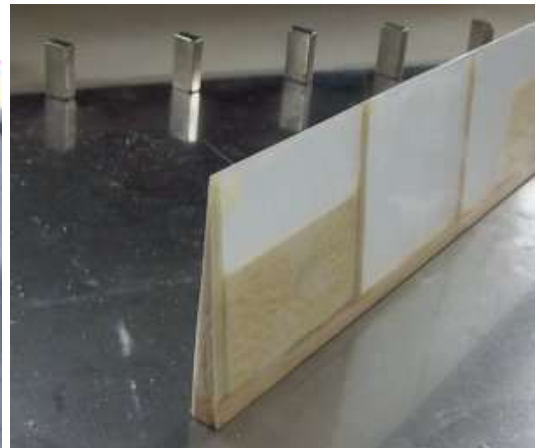
they're almost too powerful, as care is required to avoid them crushing the balsa and jumping towards each other.

The material can be glued with CA or polyurethane. I used the former to stick the spar and ribs to the bottom sheet, and the latter to stick the top sheet on, which allows some time for positioning it. Then thin CA is run along the trailing edge to seal it.

The end result is a flap which, although only 6mm thick at the front and with a trailing edge of only 0.5mm, is completely flat and very rigid. I'll probably find a number of other uses for this stuff, wing trailing edges spring to mind immediately.



Top sheet glued on



Finished flap – 0.5mm trailing edge!

Seen at the Field



A couple of electric models from **Steve Kittridge** – EDF Alpha Jet on the left, and this tiny “Ultra-Micro Series” SU-26 which is not much bigger than the bottles on the table.

Events

Forthcoming events this year and next:

Date	Event
Thursday 2 nd Sept 2010 8pm	Club meeting at the Memorial Hall
Thursday 7 th October 2010 8pm	Club meeting at the Memorial Hall
Thursday 4 th Nov 2010 8pm	Club meeting & AGM at the Memorial Hall
Thursday 18 th Nov 2010 8pm	Woodspring Wings club meeting with Tony Nihuis & Collin Hammond (to be confirmed)
Thursday 2 nd Dec 2010 8pm	Club meeting at the Memorial Hall

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, park in the pub car park immediately on your left, and the hall is just a few yards further along High St.

The summer meetings (June, July & August) 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.