

# From the Pits

www.wmfclub.co.uk

October 2011



## Editorial

Believe it or not, it's 10 years since I took over the production of this newsletter, in October 2001. Looking back to that first issue, without any photos, there's a mixture of familiar subjects (mobile phones in the pits, encouragement to take your B-cert etc.) and those long forgotten, e.g. the search for a new field. Likewise, there are some familiar names and some who have departed. One thing which seems to have just lapsed is the Fun Fly competition. Perhaps it's time to resurrect it? Let us know your thoughts.

The AGM was held recently and we have a report with the new committee and next year's club fees. Yes there is an increase, for the first time in several years, but a look back at previous newsletters does remind you how many improvements the club has made in recent years, and the fees enable us to keep on improving what is now regarded as one of the best clubs in the area.

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## Field Improvements

Anyone who has been to the field since the summer will of course have noticed the new bridge. The old one which had been there since 2003 had rotted away underneath and would soon have become dangerous. The new bridge was masterminded by **Mike Pope** and aided by several members who turned up to help, the whole thing being completed in about half a day. Substantial timbers have been used, and the side rails were made from spare railings like those used to fence off the end of the field. The new one should last at least another 10 years.



## Tea money

If you use the clubhouse drinks-making facilities, either yourself or courtesy of Trish, please don't forget to donate to the tea fund. The accepted rate is £1 per day, i.e. first drink is £1, and then all refills that day are free.

## Club Meetings

Now that we have the clubhouse and its associated facilities, it has been decided that all the summer meetings from April to September 2012 will be held at the field. Meetings in the remaining 6 winter months from October to March will be held at the Memorial Hall in Congresbury as before.

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## Club fuel

The fuel we now have available in the container is Formula Irvine Contest 10 which does seem to be one of the best mixes around, and is suitable for both 2- and 4-stroke engines. The cost is £17 per gallon which is 10% off the retail price.

**Please note that all fuel bought must be paid for in full, cash only – no credit! Payment must be to one of the keyholders: Ron Bebe, Mike Pope or Dave & Trish Beacham. Please make sure you have the correct money ready, since change is not always available.**

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## Club Logo

At the Woodspring show this year, the need arose to have a version of the club logo which could be engraved onto trophies. Since the current logo (1) was too complicated and the original artwork had been lost, a simplified one based on no. 4 here was used, and it was proposed that we adopt a new logo. Since then the artwork used for the original has been found, so it is possible to re-create the original. However, several other proposals have surfaced, so here are the suggestions so far. If you would prefer one of these, or have any other suggestions, please let the committee know.



Logo 1



Logo 1



Logo 3



Logo 2

## Aeroloop

We now have an Aeroloop (this is a device for recovering planes from trees and hedges, see [www.aeroloop.co.uk](http://www.aeroloop.co.uk)). It was offered to us at Woodspring at the WW show by the makers, and was won by Ivan on the toss of a coin! It's kept in the end of the clubhouse, and as you can see here it's been in use already.



## AGM Report

### 2012 Club Fees

The club fees have been increased by £8 for adults and OAPs, in order to ensure the club's continued growth and improved facilities. To put it in perspective, it's worth noting that the club fees have not increased for several years, and in fact went down by £1 last year to absorb the £1 BMFA rise. This year the BMFA have increased their fees by £2 for seniors (adults and OAPs) and £1 for juniors.

| Membership Type          | Club | BMFA | Total |
|--------------------------|------|------|-------|
| Adult members            | £79  | £31  | £110  |
| OAPs (65 & over)         | £65  | £31  | £96   |
| Juniors (below 18 years) | £0   | £16  | £16   |

### 2012 Committee

The main change this year was that **Mike Ling** has stepped down as Secretary after more than four years, many thanks to Mike for his hard work. **Tom Flynn** takes over.

| Title                                  | Name          | Phone        | Email Address                  |
|--|---------------|--------------|--------------------------------|
| President                              | Robin Muir    | 01275 844046 | robinmuir.homestead@virgin.net |
| Chairman                               | Mike Pope     | 01934 516869 | mikepope@talktalk.net          |
| Vice Chairman,<br>Chief Safety Officer | Dave Beacham  | 07934 661241 | db9456@btinternet.com          |
| Secretary                              | Tom Flynn     | 01934 518636 | flynnthomas@sky.com            |
| Treasurer                              | Pete Gifford  | 01934 519027 | p-gifford@supanet.com          |
| Membership Sec                         | Pete Richards | 01275 852126 | louise.richards2@tesco.net     |
| Social Secretary                       | Ron Bebe      | 01934 838131 | Ron.bebe@homecall.co.uk        |
| Committee Member                       | Ian Armstrong | 07818 861580 | ian@ia42.com                   |
| Committee Member                       | Mike Barnett  | 01934 627863 | postmaster@heliboy.plus.com    |

### Safety Officers

A rule change was voted in such that instead of having safety officers individually elected, the Chief Safety Officer is elected and then selects the other safety team members. **Dave Beacham** was elected, and has picked his team, so the safety officers are:

|               |               |              |
|---------------|---------------|--------------|
| Mike Pope     | Dave Beacham  | Mike Barnett |
| Ian Armstrong | Pete Richards | Alan Tanner  |

### Other points

A bouquet of flowers was presented to **Trish Beacham** for her tireless work making cups of tea for thirsty fliers at the field! And to round it off, Trish & Dave were voted joint winners of the Clubman of Year trophy. Well done to both.

**Craig Adams** (son of long-time member Mike) was voted the most improved flier for his rapid progress from novice to expert flier.

A number of excellent raffle prizes were donated this year, many thanks to the donors.

## Woodspring Wings 2011



It seems a long time ago now but there hasn't been a newsletter since, so just a few words to remind you...

Ivan once again wore his sandwich boards around town while handing out fliers for the event. We were blessed with perfect weather and had another good turnout with over 5500 visitors. The takings were slightly down compared with last year but overall the show was very much a success. The raffle attracted 890 entries, just 10 short of the all-time record.

After two successful years, Ivan has decided to concentrate on other things and will not be running the show next year. Of course many other people helped to make the show happen, including a large number of WMFC members, particularly **Robin Muir** as flight director. Thanks to all, and hopefully the show will be as good next year, whoever runs it.

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## Casualties



After many years in the making and waiting to fly, my Beaufighter took to the air very briefly indeed. For reasons yet unknown it lifted off at far too low a speed, which meant that there was no lateral control since there is no prop wash over the ailerons or rudder, and it cart-wheeled. Fortunately damage was not too severe and repairs are already underway, see later.

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## BMFA Area Examiners Meeting

This will be held at our field in May 2012 (exact date to be confirmed). All members are welcome to attend, especially those who wish to be examined! And to avoid embarrassing confusion that does of course mean taking your A- or B-certificates...

## Mobile Phones

I emailed **Manny Williamson** of the BMFA with a question asked many times by club members “Would we invalidate our insurance if we ignored the advice from the BMFA handbook and used a mobile phone in the flying area, also what about the use of mobile phones with applications for telemetry etc.” Manny’s reply is as follows:

*With regard to your question the answer is no, the cover is in place to protect the members, the committee and the club and this would still be in place in the event of the guidance being ignored, however the cover is for civil liabilities and does not extend to any form of protection from a criminal prosecution.*

*Using a mobile phone on the flight line could potentially be construed as “endangering” by the CAA (particularly if it was identified as the cause of a serious accident) and as such the CAA could move towards a criminal prosecution under the terms of the Air Navigation Order.*

*With regard to the use of iPhones and similar devices for telemetry, this is a relatively new development and at this stage is “unchartered territory”, essentially the same guidance will apply unless there is a way to disable the transmit/receive capability such as “flight mode” but this will require a little more investigation.*

*I hope this is of assistance*

*With Kind regards*

*Manny Williamson*

*Development Officer*

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I hope this has made clear the BMFA view

**Mike Pope**

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## Seen at the field



A couple of rather pretty monoplanes seen recently. On the left, **Dave Tremelling**’s Astro-Hog looks somewhat different in rather ambiguous military markings. On the right, **Mike Barnett**’s Miles Sparrowhawk flies very well but rather fast.

## Conversion of I/C twin to Electric

I recently received a twin-engine airframe from Mike Pope who in turn had been given it by Roger Moore. Mike and I discussed converting it to electric power, which this article describes.

The model had been designed and built for what we believe to be two 0.15 I/C motors (whatever they are) with a tricycle U/C. The idea was to convert it to electric and a tail dragger. It was intended to use existing batteries (LiPo 4000 mAh 20C), these could produce a theoretical 80amps. The plane was weighed with a battery and with anticipated weight of two motors, speed controllers, radio and servos etc estimated to be in the region of five pounds. Using a general rule quoted by a variety of sources for this type of model 100 watts per pound should be okay so the aim was to produce a system of about 500watts total.



Two motors were selected from Giant Cod plus a 40 amp speed controller, the second controller I already had. The controllers were both rated at 40 amps and were from the same manufacturer and as far as could be determined would match each other.

The main modifications were minimal and are as follows:-

1. Removal of a bulkhead in the forward section which had been to support the nose wheel.
2. From the wing, cutting a trough to carry cables from the speed controllers to the engine nacelles and drilling a hole to allow the power cables to be routed from the speed controllers to the inside of the model.
3. Add new main and tail U/C.

The existing engine supports were removed and stand offs produced to ensure adjustment for alignment with existing cowls and flight requirements (see photo).

Cooling of the battery was a concern, it was hoped that a hole approx 25 X 40mm aft of the wing on the lower surface as an exhaust and two slots in the nose would be sufficient. Mike fitted out and adjusted the servos and enlarged the nose cooling holes. A receiver switch with three wires (Spektrum) was used as this was for the signal and power from the speed controllers. The speed controllers are live when plugged into the battery hence the need for the switch. It should be noted that when the battery is connected power is present at the motors, the switch controls the receiver power.



With the motors connected and the cabling complete, a directional check was carried out. Both motors turn in the same direction. A power check was carried out with 9X6 electrical props and the system was drawing in excess of 60 amps and 700 watts, this



I considered to be too much for the system so the props were reduced to 8X6 and this delivered around 55watts and 600 plus watts. The plane was tidied up, the motor mounts locked off and the plane prepared for the field.

Mike flew the plane and on return all the components were cool to the touch, especially the battery which had been a concern. Mike reports that it flies very smoothly, and is just about impossible to stall.

Other things that have since been done are:-

1. Fitted engine cowls.
2. Improved front hatch operation, by replacing the screws with magnets to give a quick release method.

The motors used travel under a variety of names, i.e. Turnigy, Wasp, Overlander, I believe there are others out there and the specs quoted can also be varied. The motors I used were listed as XYH from Giant Cod but were EMP C3536/08-1000 kv on receipt. If anyone is curious the makers' web address is "[xingyaohua.chinatoymanufacturers.com/page/9](http://xingyaohua.chinatoymanufacturers.com/page/9)" it just trips off the tongue.

Note ESC's in airflow, they are the same type, one newer than the other.



**John Lamb**

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## Seen at the Field

Many EDF jets recently, including these four; **Chris Dorling's** AlphaJet, **Rob Wright's** Phantom and F-15, and the attractively desert-camouflaged F-15 from **Steve Kittridge**.



## From the Workshop

### ***Beaufighter repairs***

As you'll have seen in the Casualties section above, my Beaufighter is on the repair bench. Both cowls were largely intact but suffered broken intake and exhaust fairings; these were repaired or replaced. For 'quick and dirty' items like these I carve the shape out of balsa, cover with 2 layers of glass fibre followed by a thick layer of resin mixed with micro-balloons, and then just sand it all down to smooth. Quicker than making a proper mould.



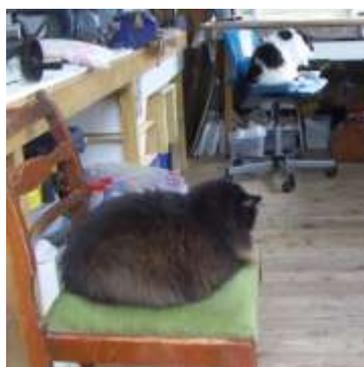
The original wing tips were hollow, but new ones were just made from thick sheet, sanded to shape and covered in glass fibre faired into the existing covering.

A number of small gashes were filled, and it's now ready for painting and another flight attempt when I get round to it. Hopefully this year. Or possibly next...

### ***Cats***

There are a number of hazards and distractions in a workshop, but cats can be the most frustrating. My workshop is a shed in the corner of the garden. In the summer the door is open and the cats wander in and out, but in the winter I got so fed up with Melissa's continual scratching and meowing to be let in, followed shortly after by the same to be let out again, that I fitted a cat flap, possibly the only workshop with one...

Mortimer is an occasional visitor out of curiosity, but Melissa seems to have taken up permanent residence; the visitor's chair is now there purely for her. At one point this summer with light rain outside, both cats came in and each time I stood up to get something I would turn around to find my chair taken by a snoozing cat. So the only solution was to bring in a second chair. Everyone happy!

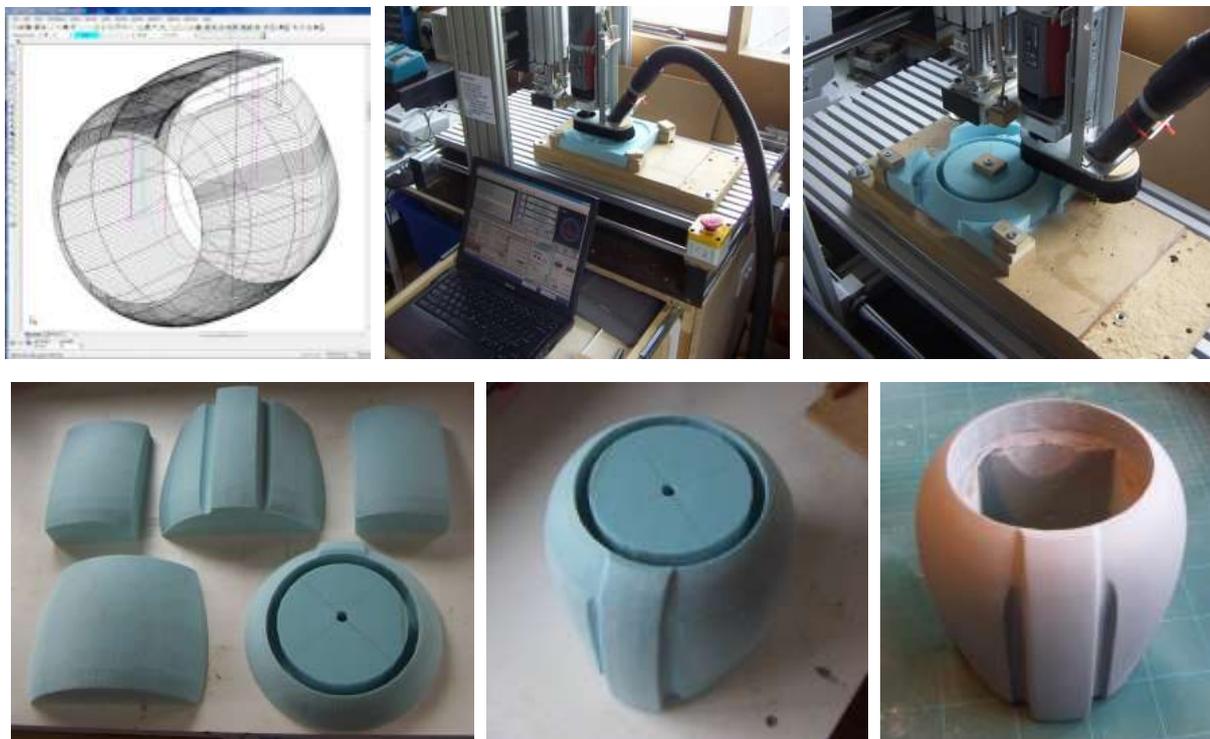


And before anyone asks, they are of course evicted before any machinery is used.

**Ki-100**

After all the repairs, I've finally got down to a bit more work on the Ki-100, for which the remaining major part is the cowl. This is not straightforward, as although it's circular at the front (apart from the gun troughs and top piece) it changes to a pear-shaped section at the rear where it meets the fuselage. After much thought about how to achieve this, the following approach was taken (there's probably an easier way but this is more fun).

The cowl was first modelled on the computer in the TurboCad program, using front sections from drawings and rear sections scanned from the actual fuselage. Then the shape was cut in blue foam using my desktop CNC machine as shown here. Because I can only do 60mm depth, it was made in 5 sections and stuck together. After a light sanding it was covered in glass fibre, then most of the foam was scooped out using a hot wire and scrapers. Finally another layer of glass fibre was applied to the inside, giving a glass/foam sandwich that is very stiff.



In a similar manner the canopy plugs were cut out of MDF and the canopies formed using the 'pop-bottle' method. So finally the whole thing is starting to come together as shown. The next step is covering, using glass cloth and Poly-C



## Events

Forthcoming events this year and next:

| Date                                  | Event                             |
|---------------------------------------|-----------------------------------|
| Thursday 1 <sup>st</sup> Dec 2011 8pm | Club meeting at the Memorial Hall |
| Thursday 5 <sup>th</sup> Jan 2012 8pm | Club meeting at the Memorial Hall |
| Thursday 2 <sup>nd</sup> Feb 2012 8pm | Club meeting at the Memorial Hall |
| Thursday 1 <sup>st</sup> Mar 2012 8pm | Club meeting at the Memorial Hall |

## 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.