

# From the Pits.

The Newsletter of the Weston Model Flying Club

[www.weston-model-flying-club.org](http://www.weston-model-flying-club.org)

April 2004

## Editorial

Recent club meetings have been very well attended, with over 30 members present sometimes. So it was rather unfortunate, not to say embarrassing, that despite plenty of advance notice, the guest speaker we invited to our April meeting was faced with only 15 members, the lowest attendance in nearly a year. It doesn't really show the club in a good light, so when we next have a guest speaker, and there is provisionally another one in October, please try to attend or at least send your apologies in good time.



The new safety rules introduced at last year's AGM proved rather controversial, with a number of members expressing concerns at what they saw as excessive restrictions on flying. Hence an EGM was held to sort it out, and I'm pleased to say that the situation has been amicably resolved. Details are inside, please take note and abide by the new procedures.

---

## Club Meetings

Date	Title	Subject
6th May	Members' Forum	Discuss your favourite subjects
3rd June	"Meeting @ the field"	Field Maintenance Night
1st July	"Meeting @ the field"	BMFA "A" & "B" Exam Night
5th August	"Meeting @ the field"	Bring all your models for a club photo shoot
2nd September	"Film Night"	Don't Miss it!
7th October	"Newton's third law"	<b>Guest speaker</b> on Jets
4th November	A.G.M.	Your club matters
2nd December	"Bring & buy"	Pre Christmas clearout

As usual, the club meetings in June, July and August will be held at the field. The meetings start at 8pm as normal, but are usually short and informal with plenty of time for flying. If the weather is bad, the meeting should be considered cancelled, as the room at the Ashcombe is not booked for these 3 months.

---

## Web Site

The Club Web Site (address above) has recently been updated by **Kevin Steerment**. There is a new look and all pages are now fully functional. Kevin will be maintaining the site from now on.

## EGM / Safety Rules

In the last newsletter I described the new safety rules and procedures which were agreed at the AGM in November. These were also included in the information packs which every member received on joining this year. Since then however, a few concerns have been expressed about the restrictions, particularly the large No-Fly Zone extending to infinity and the requirement to do cross-wind landings if necessary to avoid it.

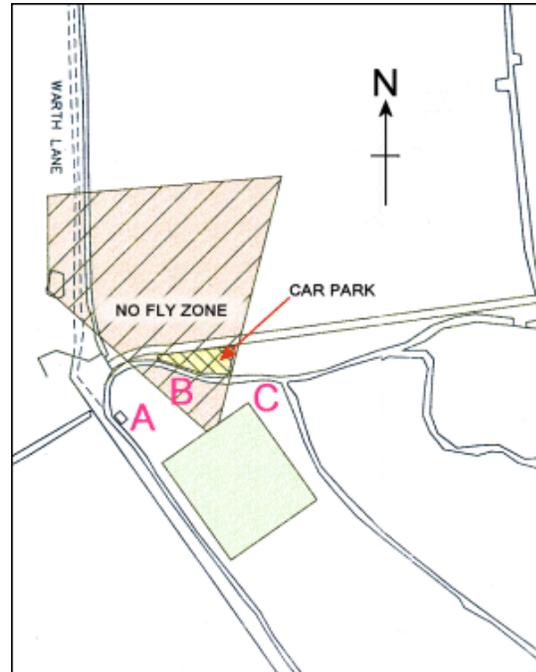
So in response to these concerns an Extraordinary General Meeting was arranged on the 18<sup>th</sup> of March to resolve the issue.

As agreed at the EGM, the field layout is now as shown here.

The pits will be sited at position **A**, **B** or **C** depending on wind direction. The flight line should be at right-angles to the pits,

The No-Fly Zone is now rather narrower. It takes in the car park and pits, and extends back to half the adjacent field, i.e. you can fly behind the cars but **well** behind them. Obviously the zone extends to cover the pits, so for example if the wind is Northerly, the pits will be at **A** and the zone will include **A** as well as the area shown.

At some time a movable fence (probably from orange plastic) will be erected on the rough grass between the flying patch and the pits to prevent over-runs.



Really, all this comes down to common sense. The whole issue has blown up because, despite numerous warnings in the newsletter and at club meetings, some people had continued to fly over the cars or pits. **It cannot be stressed too strongly that this must not happen again.** Please note that flying over the cars or pits is forbidden in the Club rules, and the Club constitution states that anyone violating the rules can be suspended or expelled. So enjoy your flying, but just get used to always keeping clear of the pits & cars.

---

## EGM / Other Rules

Also at the EGM the following changes regarding novice flyers were made to the rules:

- Rule 8c (A-Certificate required to fly unsupervised) was changed to refer to fixed-wing flying only.
- Rule 8d was added to refer to Helicopters:  
The Safety Officers and / or their nominees will check the progress of novice helicopter fliers, and if they are satisfied, will allow the pilot to practise hovering alone below 10' altitude. No more than two such novices will be permitted to fly at any time. For manoeuvres beyond hovering the trainer will advise at first until he is satisfied of the pilot's competence.

## Casualties

Some people will go to great lengths to avoid being featured in these pages. **Alan Meaney** did his best to hide the evidence of his helicopter crash in his car boot before I arrived, but reckoned without a passing member of the Weston paparazzi who snapped the mangled remains...



**Dave Beacham's** return to flying didn't last long before he also contributed to the Casualties page with this Evolution whose wings folded in mid-air after a high-speed pass.



Dave followed that up by demolishing **Roger Moore's** long-serving Jupiter by entering a spin and not leaving it!

My thanks to **Peter Jones** for the previous two photos. And speaking of Peter, here he is making his own appearance with a Ready2 that's, well, not really ready for much any more...



And finally, if you haven't heard, spare a thought for **Brian Grace**, who arrived with a brand new Ripmax trainer, was thrilled with its performance and had a really good day's flying, only to trip over on the way back to his car, fall onto the model and flatten it... At least it's been repaired since! See Brian's letter a few pages further on.

## Buy Your Own Flying Field Here!

### ***You too can own your very own flying field; all it takes is money!***

Seriously, we've been considering buying a flying field for some time and have looked at a variety of fields in and around Weston. But as we've looked around and viewed more fields, we've realised that the field that we lease is a good, possibly best, option.



Through **Pete Woods** (thanks Pete!), information has been obtained from High Wycombe and Chesham Clubs on how they went about buying their fields and very interesting reading it is too! They had to start from scratch, find a field, buy it and then get planning permission. It took them a long time. We have an apparent advantage, we have a field and 7 day planning permission; all we have to do is buy it.

Hence, over the past few months we've made a determined effort to plan how to raise the money, which we will need to purchase the field at Lower Wick Farm. We have made an offer to the farmer of £28,000, which he has turned down. We will approach him again.

### ***In the meantime, to date –***

- A small number of members have pledged £10,500
- We asked North Somerset Council and they have promised a sum of around £3,000
- We approached our Bank (HSBC) and they have indicated that a loan of up to £20,000 could be made available. However, this would need to be repaid from the Club's income and, even if possible, that would put a severe strain on the Club's resources.

Hence we need to raise more money, but from where?

We have prepared letters asking for donations/sponsorship to help purchase our field and we are in the process of mailing them to a variety of organisations. These fall into three categories -

- Model Trade; our club is worth about £40,000 pa to the trade and we hope the trade will be prepared to support our efforts.
- Local companies; we are a local social amenity in which their employees and customers can participate.
- Award bodies; Lottery, Sport England etc whose purpose is to support sports clubs and good causes.

As of this moment we don't know what sort of response there will be but as the saying goes, "If you don't ask, you don't get!"

We'll keep you in touch as with progress as it happens.

**Ron Bebe, Mike Ling, Robin Muir**

## Scale Project – Berliner-Joyce OJ-2

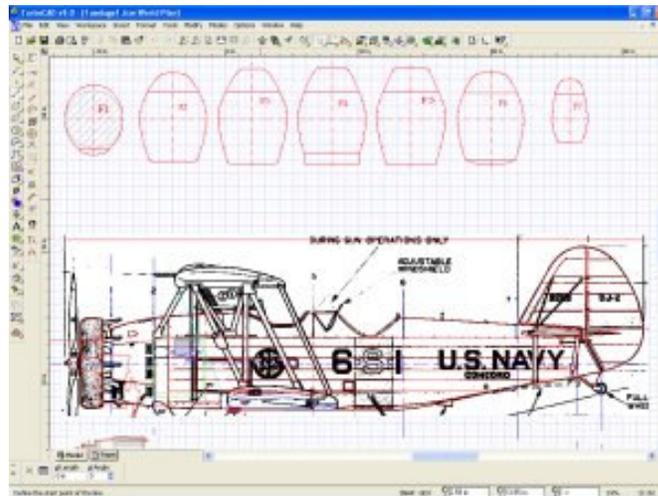
“Berliner Who?” Don’t worry, I’ve not yet found anyone else who has heard of this company either. It began as the Berliner Aircraft Company in Maryland USA in 1920, merged with Joyce Aircraft in 1929, and with General Aviation Corp. in 1930, later to become North American Aviation. The factory was closed in 1934 and the name Berliner-Joyce disappeared forever. End of history lesson.



The OJ-2 of 1933 was a reconnaissance / spotter aeroplane for the US Navy. It was not really a successful aircraft; only 38 were produced in the days when production runs of hundreds were common. None survive today.

I first came across the plane in the Paul Matt Collection. I’ve described this before in a previous newsletter, but briefly it’s a couple of books and supporting CDs giving detailed 3-view drawings & photos of a number of rare aircraft, mainly from the inter-war years. The OJ-2 caught my eye and I was determined to build one.

I first scanned the drawings into my computer and imported them into the TurboCad program as bitmap images, scaled to the correct size for the model, which is built to 1/7 scale. Here I drew on ribs, formers etc. which were then printed out to form paper templates and plans. The templates were stuck to balsa or ply sheet using spray mount adhesive and cut round.



Construction was based heavily on my experience with my Gloster Gladiator. The fuselage is made from a central box structure for strength, with curved formers added on the top, bottom and sides to give the correct shape, and then stringers and sheeting were added. The wings are pretty conventional built-up structures with inset ‘Frise’ ailerons using Robart hinges extended with aluminium tubes so that the pivot points are in the correct positions.

The radial engine is very prominent on the OJ-2, with only a narrow cowl over it, so I had to do a full 9-cylinder dummy engine. Cylinders were made out of balsa discs threaded onto 3mm dowel, pushrods were also from dowel, and the engine plate and cowl were fibreglass mouldings. Inlet and exhaust pipes were cast in polyester resin filled with micro-balloons, from latex rubber moulds.

Covering is Solartex throughout. The top surface of the top wing actually has two layers since yellow on its own is rather transparent, so I covered it with white first of all, then yellow. The top of the fuselage, which is metal on the full-size, was sprayed with primer, rubbed down to remove the visible overlap between the pieces of Solartex, and then sprayed light grey. I used Solarlac paints in general, with some acrylic & enamel for the dummy engine and interior. The markings are cut from Solartex, the lettering and fuselage badge having been printed out from the computer, stuck on the Solartex with spray mount, and cut round.



Hatches and inspection covers were cut from thin aluminium, commonly known as printers' lithoplate, although I got mine from cutting up aluminium drinks cans and annealing the metal. It's easily cut with scissors or a knife, and rivets or fasteners can be simulated by making indentations from behind with a nail or gear wheel before gluing on with cyano.

The rest of the rivets / fasteners on the fuselage and cowl were made by the 'tape method', i.e. spreading filler over a piece of masking tape with holes cut in it to form a row of raised dots.



The rigging is elastic cord and is only for scale effect as the wings are very strong, although it does hold the inter-plane struts in place; holes in the ends of the struts engage in wire hooks in the wings and the elastic holds the struts against the hooks.

Power is from an OS 52FS 4-stroke which should be easily sufficient given that the real thing was quite a sedate flyer. It's mounted inverted and is pretty well hidden by the dummy radial engine.



Cockpit detail is yet to be added, other than the crew, two US Navy figures from 'Pete's Pilots'. That and other detail should take up another month or so.

So it's not taken to the air yet, but hopefully by the time of the next newsletter it will have flown, and I'll be able to include some flying pictures.

## Seen at the Field

Kevin Aldridge's scale Hughes Notar (NO Tail Rotor) hovers over the field. Directional control is achieved by an engine-driven fan which drives air down the boom to the exit slot visible here, controlled by a servo-driven gate valve. The model is apparently a bit underpowered and has less directional authority than a conventional helicopter.



One problem is that it can't just be fitted with a larger engine, because a slower revving engine would move less air through the fan, reducing the directional control even more. Looks good in the air though.

---

## Aerial Photos

For those of us who have been curious or just plain nosy about the construction work going on at the sewage works just past our field, here is a sneak look, taken from a camera on board my Kadet trainer at about 200m (600ft) altitude.

The new constructions are the tanks in the centre of the picture.

The red shapes just visible beside them are the cranes whose jibs you can often see from our field.



## Sandown Show

Yes it's nearly that time of the year again. Dates for this popular event are May 22nd and 23rd

---

## The Power of the Web

When I finished my Gladiator scale model a few years ago I put some pictures on my website ([www.cix.co.uk/~iarmstrong](http://www.cix.co.uk/~iarmstrong)), more for my own amusement than anything else. Apart from a brief mention in a previous newsletter I hadn't publicised it anywhere. Last year however, I received an email from a guy in Norway who had found the site through a search engine; he was also building a Gladiator from the same Brian Taylor plan and wanted some advice. We've since exchanged several emails and are following each other's scale activities. Hence it's always worth telling people about what you're doing, you never know where it might lead! Yes, you can take that as a very strong hint to contribute more to this newsletter...

**Sverre**, for that is his name, also put me onto a very good web forum site for anyone interested in serious scale modelling: [www.rcscalebuilder.com](http://www.rcscalebuilder.com)

## Tails of Woe...



An article in one of the model magazines recently bemoaned the strength, or lack of it, of some of the current crop of ARTF models, particularly with respect to the tailplane, which can fail in flight. As you can see from the pictures, this has also happened at our club, on more than one occasion. While relatively little damage has occurred here, it's obvious that an aircraft coming apart in the air is potentially very dangerous. So if you have an ARTF, particularly the very light ones now around, take a close look at it and if necessary strengthen the tailplane or any other suspect part, especially if you expect to be doing any sort of rapid aerobatic manoeuvres.

## Email

When sending out the newsletter by email I've had a few which have bounced because of incorrect addresses. When filling out your application form next time, please PRINT your email address carefully so we can read it. And if you've since changed your email address, please let both the Membership Secretary **Paul Lathall** and I know, so we can keep the list up to date.

## Safety

Some people have recently been observed starting their engines with their models facing into the pits. Please remember that models should always face out of the pits when starting engines, even if restrained (and they should **ALWAYS** be restrained).

## What Comes Down Must Go Up.

Sunday 14<sup>th</sup> March saw an all day visit by the Club to the Helicopter Museum in Weston. As this is something of a spiritual home, we were welcomed by the volunteers who run the Museum and allowed to set up display tables in the main hangar. Although billed as a static display it was a mere coincidence that various flight boxes and chargers appeared discretely under a couple of very wobbly trestle tables and that batteries were soon receiving amps as fast as they could be accepted.



There were a number of scale and sports models on static display and some ARTF helis but of great interest to visitors was a large collection of rubber powered balsa models. These performed extremely well and a concept model of the 'Osprey' rotorcraft regularly travelled the length of the Museum's Wessex helicopter, flying and landing smoothly, proving that you don't need expensive radio and collective pitch to make something work well.



Soon the whine of hard pressed electric motors could be heard as **Dave Cuff** used the still air to fly the Weston Super Models 'blimp' round the rotor heads and tail booms of the exhibits, and after that flying started in earnest. The area in front of the display was perfect for smaller electric helicopters and a brace of Hummingbirds and other indoor models were soon whizzing about between, and occasionally bouncing off, the parked helicopters.

These were joined by a model SRN6 hovercraft which had a James Bond style encounter with the Blimp as the two slid about the hangar with bursts of power and

lots of sideways travel, doing little more than bumping into spectators and generally getting in each other's way. An unkind suggestion that the Hovercraft should attempt to snag the blimp's radio aerial in the prop and winch it down was ignored! During the day Dave built the new Bell 222 bodied Hummingbird and after some teething troubles it performed well, looking beautiful both on the ground and in flight – with wheels it can also be taxied, a new experience for a micro-heli pilot.

Due to the rain and wind, flying by i/c models outside was very limited but the hangar made an ideal place to use the electric models and with some experienced members on hand we had the chance to trim out a pair of reluctant Eco8s, one in particular being so out of trim that it refused to lift off. By the end of the afternoon and following much

discussion and adjustments, both were flying although vibrating badly, one with blade balance problems and damaged transmission, the other with a bent rotor shaft.



There were various minor incidents during the day. My Hummingbird had a heavy encounter with the Museum's Wessex and lost a rotor blade when it tried to fly autonomously into the chopper's open engine compartment, and another suffered minor damage to the fuselage, but the star turn of the day came when it was decided to alter the ballast of the Blimp. As the hangar cooled down towards the end of the afternoon, the helium filled envelope lost lift and needed to have some of the weight (a couple of 2p coins) removed from the gondola.

Unfortunately the laws of physics dictate that if weight is removed from an object of neutral buoyancy, it will rise. An over-enthusiastic grab for the model as it floated past at head height created a splendid sound of separating Velcro and a muffled exclamation of surprise, leaving an embarrassed person (who shall remain nameless to preserve dignity) holding the gondola and engines of the said machine high above his head. Unfortunately both Boyle's and Newton's laws now kicked in with a vengeance, and the envelope, relieved of its load, soared majestically into the heavens and lodged itself firmly in the very apex of the hangar roof to the accompanying cheers and shouts of 'pull'. It is likely to remain there for a considerable time until the gas leaks out and it eventually descends – and you thought keeping aloft was the difficult bit!

A very enjoyable day with free admission to the exhibits if you had a model. There was a relatively low turnout of visitors to the Museum, possibly due to the weather, but we had a lot of interest in the static models and a good crowd gathered whenever there was flying. The hangar is a perfect place to operate indoor models with good lighting, still air and plenty of space between the exhibits.

A bonus for the less experienced members (me) was that experts were on hand to sort out problems, making for a good day's flying in ideal conditions and an excellent opportunity to get to grips with handling and trim problems in a controlled environment.

**Ross Floyd**



## Readers' Letters

Fellow club members,

On Sunday 7<sup>th</sup> March **Terry Davis** set up my brand new Ripmax T.40 trainer with other members. As it was a first flight, Terry flew the plane which performed superbly. In turn I flew it and was delighted with its accurate response to control inputs and generally smooth performance.

Deciding to quit while I was ahead I marched over the little bridge and tripped, making an unscheduled take off and landing on the model, damaging the wing, fuselage & tail.

This was not the worst moment of my life, but it came close.

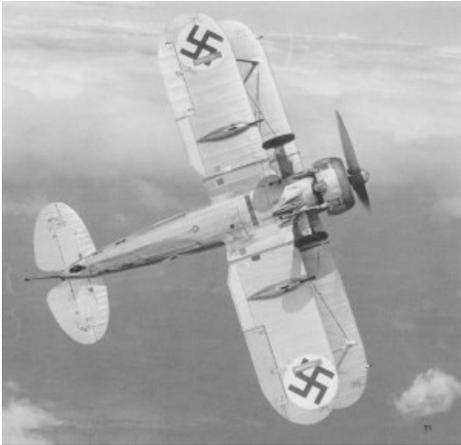
Later a big surprise at the April club night. **Pat Teakle**, who had been nursing a plastic bag, presented me with a collection from the members.

I will always remember the kindness of our club members and am so grateful. Thank you all very much.

**Brian Grace**

---

## Know Your Aircraft



Full marks if you can recognise the aeroplane pictured here. Most members of this club really should know...

Even fuller marks if you can name the air force it belongs to.

Answers next issue.

---

## Club Members of the Future

Budding pilot **David Thompson** (aged one and a half) gets to grips with the flight simulator. According to Dad **Robin**, David likes crashing helicopters, which gives him an affinity with several other club members...



## Events

Forthcoming events this year:

Thursday 6 <sup>th</sup> May 2004 8pm	Club meeting at the <b>Ashcombe</b>
Sat 22 <sup>nd</sup> & Sun 23 <sup>rd</sup> May 2004	Sandown Model Symposium
Thursday 3 <sup>rd</sup> June 2004 8pm	Club meeting at the field
Thursday 1 <sup>st</sup> July 2004 8pm	Club meeting at the field
Thursday 5 <sup>th</sup> August 2004 8pm	Club meeting at the field

## Club Meeting Venue



## Email

If you currently get this newsletter by post and you would prefer to get it by email, let me know at the address below. Email recipients get their copy earlier and in full colour!

All club meetings apart from those in the summer months are at the **Ashcombe** pub in Ashcombe Road WSM.

## How to contact the Editor

### Ian Armstrong

Address: 4 Jubilee Drive, Failand, Bristol, BS8 3XD

Tel: 01275 392 995

Email: [iarmstrong@cix.co.uk](mailto:iarmstrong@cix.co.uk)

Thanks to **Steve O'Brien & Paul Lathall** for printing and distribution.

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.