



AUGUST 2023

**** THIS WEEKEND ****

Popham Model Show

September 2nd and 3rd

Happy August everybody!

And, yes I know the month is nearly over, again!

Another busy month, with many flying hours down the field and even a visit to the BMFA national centre at Buckminster.

Hopefully see you all down the field soon.

Chris

STOP PRESS – from the Committee

For the club, this year has been a better than expected year financially and it has been decided to try and recreate the monthly (winter) meetings at the Hamble club. Other than just a social get together, the committee is hoping to get some other interesting themes for these evenings. Please do let the committee know if you have any ideas.

The dates booked in the diary are as follows...

19th September – Our first indoor get together since last Christmas, bring your latest project, things you want to sell etc., You will also be able to fly your small heli's / quadcopters.

17th October – TBA – perhaps a skittles evening?

21st November – TBA

12th December – Arrival from 7pm, **AGM** at 7.30pm **Christmas Party** at 8pm.

And remember these evenings are not weather dependent. 7pm for 7.30 start.



A must see Video for almost everybody..

Your Definitive Guide To RC Stalls - <https://youtu.be/dyPiRDKsuJI?si=Qeu7PYJNFIDTEfoi>

So what are all those little holes for?



TIPS ON RC SERVO INSTALLATION AND SETUP

<https://mail.hobbyking.com/4SQP-99GV-9W6L6-9Z29U-1/c.aspx>

So, that is what you are supposed to do with all those little holes!

This is 'Sick'.. not my words!

I hope the following link works and I apologise for the language. It really is worth a watch, what are the chances!

<https://www.facebook.com/reel/779864860287104?s=yWDuG2&fs=e>

Bet your Neighbours haven't got one of these!



Boeing 747-300 Complete Flightdeck.

A unique opportunity to purchase a complete exterior and interior flight deck from this iconic aircraft. As can be seen from the pictures it is complete and in perfect condition

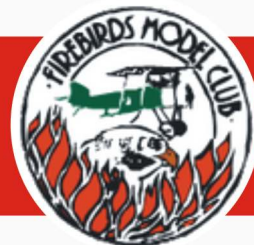
Supplied with registration confirmation for tracing the history, prior to decommission this was operated by the Russian Trans Aero airlines.

Feel free to contact if you require any additional information

+44 (0)7538-673632

Cleared funds prior to collection





Safety in the pits – Geoff Griffiths

ELECTRIC

Due to the reliability of radio gear and electronic speed controllers we seem to have become a bit careless when it comes to pit safety and the potential danger of a prop starting to spin unintentionally. BUT the safety precautions have not changed. Don't rely on the technology alone.

Once the LiPo has been connected it must be assumed that THE PROP COULD START SPINNING AT ANY TIME! Therefore, if the model is ready for flight IT MUST BE RESTRAINED AT ALL TIMES IN THE PITS. How you do this is up to you. It might just be a case of keeping a firm grip on the model, but something looped around the tail and pegged to the ground will also work. When plugging in the LiPo ALWAYS assume that the prop might start up on it's own, so keep your hands completely clear of the prop arc and don't relax until the speed controller has finished priming. Be equally careful returning from a flight!

If you need to make programming changes to the Tx, the safest thing is to take the prop off first.

I/C

It was always the rule that i/c engines should be started facing out from the pits, but not towards the strip. This is still the case although it's a bit less convenient with our combined pits and seating area. The most important thing is to position the model such that no one is in the prop arc. It's very rare, but props can shed blades and can cause very serious injury. Again, The model MUST BE RESTRAINED IF THE ENGINE IS RUNNING.

More Changes!

CAA Proposed Drone Rule Changes in UNDER 5 Minutes

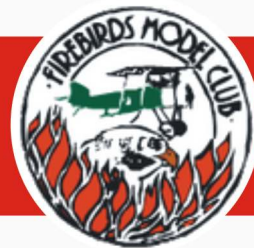
https://www.youtube.com/watch?v=E1_9T95nNqM&t=138s&pp=ygULRTFfOVQ5NW5OcU0%3D

just a reminder

Our farmer landlords have asked us not to leave our wind sock etc. on the long grass (their crop) make sure the wind sock is on our mown area. Obviously this always applies to anything we take to the site, models trolleys deckchairs etc. and of course we should never walk through the long grass other than if absolutely necessary, i.e. to recover a damaged model. Please remember, if you do recover a model it is always good practice to stop and look around the area before you pick up the pieces. Look for and remove detached spars, pieces of polystyrene or balsa and that illusive other half of the propeller!!

Welcome to recent new members

A big welcome to Brian Herbert and Jeremy Nightingale, our new members. As always, if you see somebody you don't recognise down the field, it is always good to question them. Once you know they are our new members please make them extra welcome.



Please support Popham Model Airshow if you can. ** THIS WEEKEND **

The Southern area of the BMFA is heavily involved in this show bring our nearest show it would be a shame to see it not grow.



Early bird discount



Saturday, 2 September

Popham Model Show 2023

Popham Airfield brings together hobbyists, professionals, the general public for our biggest ever model show.

New Chinese Source for bit's and pieces.

Temu is another Chinese seller a bit like Banggood or AliExpress but as it is only starting out in the UK it is offering some good deals for first time users. This little drone for £3.09 was a real bargain. Not worth the promoted £72.99 but well worth £3.09! One word of warning when buying from these sites check the measurements as things often appear bigger in the pictures than they are when they arrive.





Never be shocked at what some people keep in their Garages

Rolls-Royce Griffon Mk58 first start up
with contra rotating propellers



What's in your garage? Why not send the editor a photo for future publication?

WhatsApp / Club Chatter

The Club's WhatsApp is always active, and some chats are worth immortalising.

~ Chris

Geoff Griffiths

Anything is flyable, but
sometimes not landable! 🤔

Everything lands as gravity
takes care of that. It's just
where and in how many
pieces! 😊

21:05

Geoff Griffiths

So true 🤔, but there is
always glue!

21:06

Paul Brown FLYING Club

Better take a carrier bag then

21:13

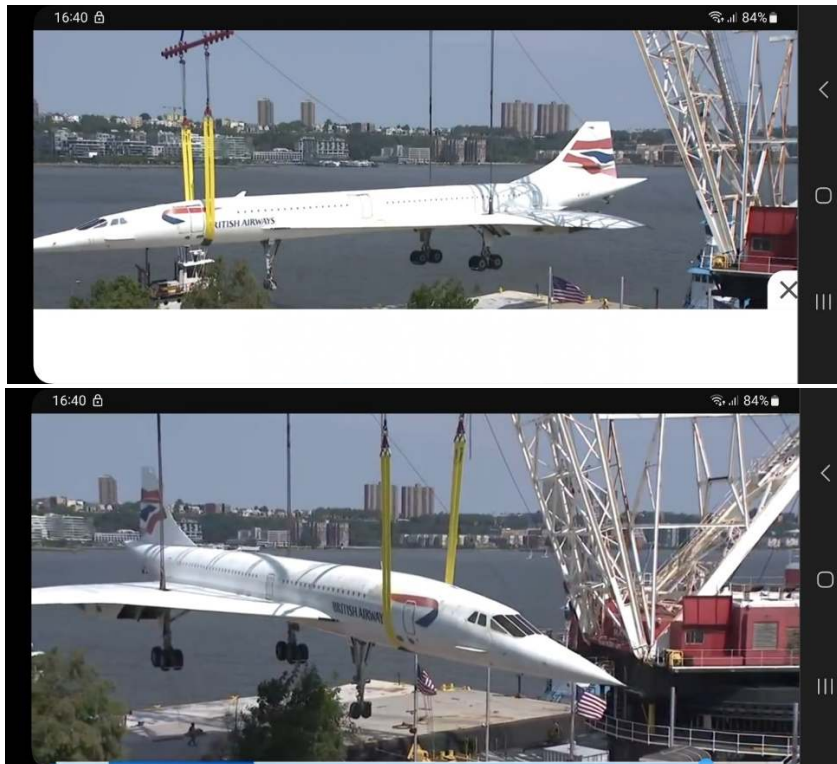
Remember there are 2 group chats one for general chat, and one for encouraging / arranging / announcing flying site visits.



Who said Concorde would never take to the air Again!

Although this 'flight' never achieved anywhere near Supersonic speeds and was in fact just a short lift from the Intrepid Sea, Air and Space Museum (New York) to a waiting barge, it was still an opportunity to waken past memories of seeing her fly.

The Concorde was being taken away at the start of a three-month-long restoration.



Mowing team..

Any members with some spare time? Please consider joining the mowing team. Full training given!
Speak to a committee member for more information.





Boeing 737 cockpit

Many say that flying 'full size' can be easier than flying r/c due to orientation, but do they really need all those knobs and switches?



A bygone age.

Photo found on the Internet, wouldn't it be nice if more youngsters showed an interest in modelling today.



NUDITY Warning!!

Sorry (Ed.) I couldn't help but share this image, but I do apologise if you are easily offended.

Although a joke image it should be a poignant reminder of the rules under which we fly. A reminder...





We went to Buckminster

What a ridiculous idea, BMFA Buckminster is far too far away, over 170 miles and at least 3 hours driving, complete madness, especially when we have our own perfectly good flying site down here in Southampton...

Well, yes, the above is all true, but I have now learnt that the BMFA National centre is actually a really special place and we (Chris and Paul) had a wonderful weekend there, despite the British weather!

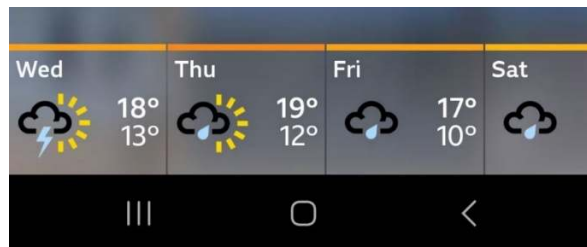


Our arrival at Buckminster.

**BMFA Buckminster
Summer Fly-in hoste...**
Lincolnshire

🕒 Starts: 04-08-2023 - 09:30 hrs -
Ends: 06-08-2023 - 17:00 hrs
📍 BMFA Buckminster, Sewstern,
Grantham, UK

Achievement Scheme Event
BMFA Buckminster Event



This is how the event was advertised and the weather forecast for that weekend...



But the photos on the BMFA web-site made it look so inviting



OK, we know, with that weather forecast, we did take a bit of a risk and the weather wasn't great. However, on arrival the above view greeted us, beautiful views and miles of clear flyable skies.

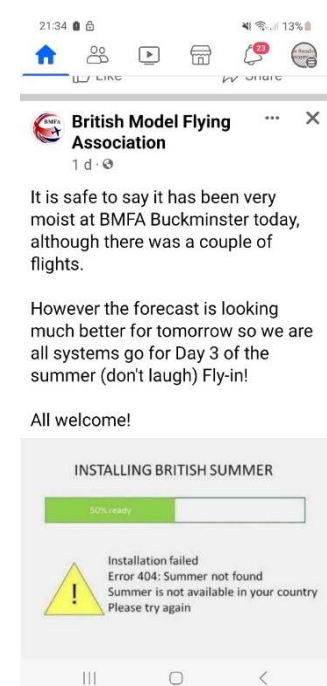
And what a friendly place, within minutes we were chatting to James, from near Gatwick (see right), his son was learning to fly, it's him and his instructor in the scenic picture above. James and his son had been there for the previous event and had been camping on-site in their Bongo camper van.

We also met a guy from the Orkney Islands, there practising for his B certificate, the journey for him was over 600 miles and included a ferry trip!! (never again would I complain that Buckminster was a long way to drive) He was flying a Max Thrust Riot, and said that although he was practicing for his B certificate that he hadn't yet exhausted what the Riot was capable of.



Whilst there, it was strange reading the BMFA Facebook feed, which I often do, but this time, I was involved with and experiencing what was going on, live!.. One of the BMFA's few full time staff Andy Symons was there making sure everything went as it should do. We soon found out that he was responsible for the web-site and Facebook posts. He is also an instructor and examiner alongside his official job which is liaising with all the clubs across the country.

The Facebook post on the right shows Martin, who we chatted to and watched practice for his exam, receiving his certificate. The 2 examiners are Simon (Left) and the aforementioned Andy on the Right.





We were treated to some excellent 'private' flying displays whilst at Buckminster. The guy in the picture on the right is a regular show flier at most of the big model shows across the country. If you look very carefully you can see his daughter in the photograph on the left (she was beautifully behaved). Also while I remember, a BIG thank you to Simon's wife who made and delivered cakes to the flight line.. what a wonderful lady.





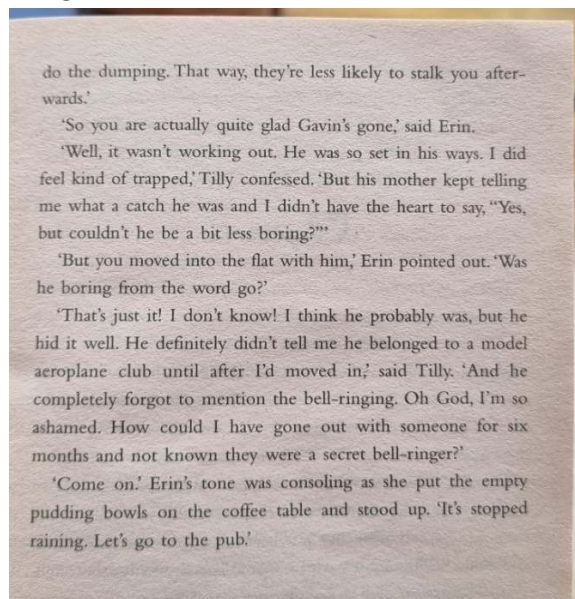
More Wonderful pictures of our weekend at Buckminster.

What Chance has our hobby got!

Based on a Wikipedia search Jill Mansell is a British author of romantic comedy. Her books have sold over fourteen million copies worldwide. But what is her problem with Model Flying *?!.

So, my wife and I are sat in the garden, me listening to a BBC podcast and her reading a book from the above author when she thrusts the book in my face.. "read this" she says.. I was shocked at what I read, what chance has our hobby got when our wives and female friends are reading this type of negative writing.

See below the offensive writing.





A Little confession..

Whilst at Buckminster in challenging wind conditions, I landed my Riot XL rather heavily..... no, more honestly I crashed, heavily! Anyway I have almost rebuilt the model, (not pretty, but functional). I just wanted to confirm the thrust angle, was it down and to the left, or the right ...I just wanted to make sure.. So a quick check on the internet was needed and confirmation was found (see below line 2). But, whilst I found the answer I needed, what followed was an unbelievable amount of informatio... all I actually needed was "down and to the right", but I got was..

Thrust Angles. (from the internet)

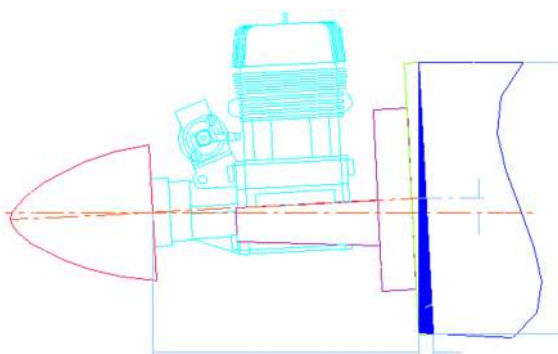
One of the big construction problems with model aircraft and their engines is that, on most models, there is side and/or down thrust required. The engine usually points down and to the right. Depending on the model, this is usually about $1\frac{1}{2}^{\circ}$ down and $2\frac{1}{2}^{\circ}$ to the right. This causes a secondary problem because to ensure that the propellor spinner is on the thrust line of the model, the engine mounting must be positioned above and to the left (looking from above the model).

The best way to set the side and down thrust is to angle the "firewall" (the fuselage former that the engine mounting attaches to). To achieve this, both fuselage sides must be cut to the down thrust angle and the right fuselage side only must be cut to allow for the right thrust angle. Complicated or what? For those of us with access to 3D CAD, this is no big deal. For those of us who found Maths as interesting and comprehensible as Relativity Theory, there has to be an easier way! Hopefully, this is it.

A quick look at the model plan will let you know what the distance is from the rear of the propellor spinner to the firewall. Remember that you require a gap of about 3mm ($\frac{1}{8}$ ") between the propellor spinner and the nose ring of the cowling. For the sake of calling this distance something, we'll call it the Overall Length.

Down Thrust

We'll start with the Down Thrust angle. How much shorter does the bottom of the fuselage side have to be to get the correct down thrust angle and how far above the thrust axis does the engine mount have to be?



For the mathematically inclined, the Trim Length has a formula (inevitably!)....

$$\text{Trim Length} = \text{Firewall Height} \times \tan(\text{Down Thrust Angle}^{\circ})$$

Most calculators should be capable of this calculation (or use the Windows 95 calculator in Scientific Mode). As an example, for a Down Thrust Angle of 1.5° and a Firewall Height of 100mm (4"), the formula becomes:-

$$\text{Trim Length} = 100\text{mm. (4")} \times \tan(1.5^{\circ}) = 2.62\text{mm. (0.105")}$$



The Up Length is calculated similarly.

This time the formula changes to:

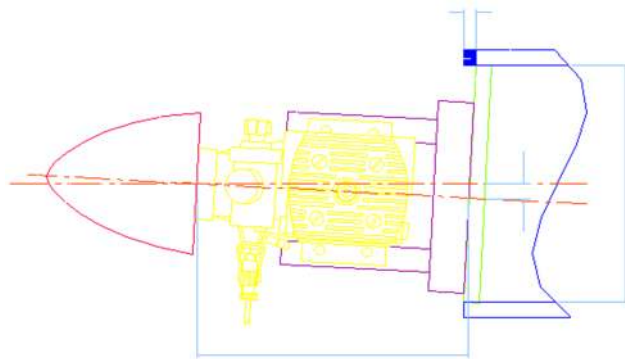
$$\text{Up Length} = \text{Overall Length} \times \tan(\text{Down Thrust Angle}^\circ)$$

For example, if the Overall Length from the Spinner to the Firewall is 125mm. (5") and the Down Thrust Angle is 1.5° , the formula becomes:-

$$\text{Up Length} = 125\text{mm. (5")} \times \tan(1.5^\circ) = \underline{3.27\text{mm. (0.131")}}$$

Side Thrust

To set the required Side Thrust, we have to trim a strip from the right hand fuselage side only and offset the engine mount to the left to compensate for this angle. These values can be calculated in a similar manner to the Down Thrust requirements.



As with Down Thrust, there are formulae for calculating how much to trim from the right side fuselage and how far to offset the engine mount:-

$$\text{Side Length} = \text{Firewall Width} \times \tan(\text{Side Thrust Angle}^\circ)$$

$$\text{Offset} = \text{Overall Length} \times \tan(\text{Side Thrust Angle}^\circ)$$

Using the Overall Length (125mm. [5"]) in the example above with a Side Thrust Angle of 2° and Firewall Width of 75mm (3"), the formulae come out to:-

$$\text{Side Length} = 75\text{mm. (3")} \times \tan(2^\circ) = 2.62\text{mm. (0.105")}$$

$$\text{Offset} = 125\text{mm. (5")} \times \tan(2^\circ) = 4.37\text{mm. (0.175")}$$

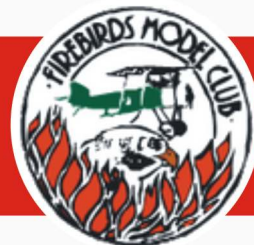
Summary

So what have we got and what does it mean? We have to angle both sides of the fuselage equally to give Down Thrust and raise the Engine Mount above the 0° line and these are dictated by the formulae:

$$\text{Trim Length} = \text{Firewall Height} \times \tan(\text{Down Thrust Angle}^\circ)$$

$$\text{Up Length} = \text{Overall Length} \times \tan(\text{Down Thrust Angle}^\circ)$$

We also have to trim a strip from the right hand fuselage side and offset the engine mount to the left and these are dictated by the formulae:



Side Length = Firewall Width \times tan(Side Thrust Angle°)

Offset = Overall Length \times tan(Side Thrust Angle°)

Since tan(Angle) is just a value which varies with the angle, an easier method is to tabulate some common values for angles and re-write the formulae to:

Trim Length = Firewall Height \times Down Thrust Multiplier

Up Length = Overall Length \times Down Thrust Multiplier

Side Length = Firewall Width \times Side Thrust Multiplier

Offset = Overall Length \times Side Thrust Multiplier

Thrust Angle Multipliers							
0.5°	1.0°	1.5°	2.0°	2.5°	3.0°	3.5°	4.0°
0.0087	0.0175	0.0262	0.0349	0.0437	0.0524	0.0612	0.0699

Use the table above to find the multiplier for the required Down and Side Thrust Angles.

The example we have used so far has an Overall Length of 125mm. (5"), Firewall Height of 100mm. (4") and a Firewall Width of 75mm. (3"). The Down Thrust required is 1.5° and the Side Thrust is 2.0°.

Looking up the table gives a Down Thrust Multiplier of 0.0262 and a Side Thrust Multiplier of 0.0349.

Trim Length = 100mm. (4") \times 0.0262 = 2.62mm. (0.105")

Up Length = 125mm. (5") \times 0.0262 = 3.27mm. (0.131")

Side Length = 75mm. (3") \times 0.0349 = 2.62mm. (0.105")

Offset = 125mm. (5") \times 0.0349 = 4.37mm. (0.175")

Now that the calculations have been done, the fuselage sides and firewall can be modified to generate the correct angles.

And... Back from the Internet :-)

Keith stepping back due to personal CIRCUMSTANCES

Our Membership secretary Keith is taking a step back from his duties for a few months due to personal circumstances. Paul has taken on his role temporarily and is already doing an excellent job, Keith promises to be back in office as soon as things return to normal.

Flying times

Did you know that Firebirds model club rules allow flying every day of the week, almost every day of the year? Please see current flying times at the end of this Newsletter.



Another question for the Club's committee

As everyone know the clubs main focus is fixed wing and that we don't normally allow rota driven models and multi-copters to be flown at our site. So where does an autogyro fit?

One of our most prolific builders and model fliers brought his wonderful Auto-gyro down to the field this month and even managed a successful flight.

Due to the lack of wind on the day getting the lift rotor up to speed wasn't easy, but once airborne the model flew well. Unfortunately, a heavy landing broke a linkage so we'll have to wait a little while for the next flight.

Martin told me..

It's called a Gyroo built from the free plan in May 2022
RCM&E

Fuse is 3mm ply and balsa core Blades are pine LE and
balsa for the rest Head assembly supplied by "Coolwinds"

It all looks so easy on YouTube !!





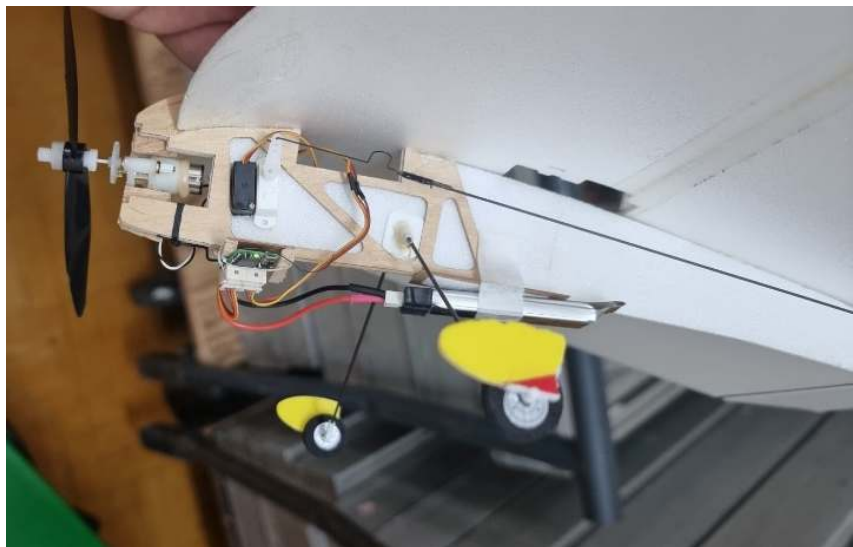
Indoor Flying to continue through the Summer

Allan from the Waltham Chase club is going to keep the indoor flying sessions going at Wickham community centre throughout the summer (subject to enough interest). If you are interested speak to committee member Paul who has all the details.

Below, see Paul and the indoor flying hall. I think the caption for the first picture should be, 'You can only take as much as you can carry'... no limits there then!



This month Paul, Chris and Geoff attended at least one session and had great fun, flying both small aeroplanes and small heli's. The owner of the model pictured below appeared to be having great fun too, so I took a few photos.... relatively simple, but great in the air.



Thank you Alan and Debbie

Following yet another wet weekend forecast Alan and Debbie gave up their dining room table to allow the committee a place to hold this month's committee meeting, thank you both. Also Thank you again for yet another Barbeque this month!!!



Remembering Val Stanton

Val Stanton was always a regular at Christmas Parties, stood steadfastly next to our long standing club member Roger. Several members attended Wessex Vale crematorium to say goodbye. She was a good friend to the club. A card was sent on behalf of the club to Val's family.

And it is also sad to note that the service was on the 15th August 2019 exactly four years ago that we held a charity auction of Roger's life time of flying equipment.



Paul preparing to maiden a recently rebuilt WOT4



HAVE YOU BEEN MISSING FROM THE FLYING FIELD?

Last month there was a photo of Lee Fryer who hadn't been seen at the field for many months.

Well here is a photo of Richard Scrivener's visit to the field. He, like Lee, hadn't been seen for ages. Good to see you Richard!

There are a few other members that we haven't seen down the field for a while, if you are one of them, don't be shy, even if you don't have anything ready to fly, come on down!

Or... you can always join us at one of the Hamble Club events.





Good or bad?

HobbyKing have announced the opening of a new EU warehouse. They claim that this latest modern, state of the art warehouse will service customers all over Europe with much better shipping rates than they have been able to offer recently. They will also be offering free shipping on orders over certain values, depending on the shipping area.

As this announcement was made, the new warehouse was receiving brand new stocks of batteries, servos, motors, ESCs. They say that it will take time to be back to a full inventory.



Firebirds Bequeathed a Collection cont..

Remember last month's discussion about the bequeathed Hawk and how it had sold on eBay. Unfortunately, the successful bidder didn't come forward and pay / collect. So, the Hawk was advertised again and the winning bidder did pay and collect this time. However, the winning bidder is not a modeller and the model may never fly! The new owner is the Playtrain activity centre in High Wycombe. The owner collected the model and sent me these pictures of the model in its new home. The monies earned from the auction are now in club funds.



<https://playtrain.biz/>



Flying times : (from December 2021) correct at time of newsletter publication

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<i>Quiet / Electric</i>	<i>Electric & I/C</i>	<i>Electric & I/C</i>	<i>Electric & I/C</i>	<i>Quiet / Electric</i>	<i>Electric & I/C until 2pm then Quiet / Electric until 4pm</i>	<i>Electric & I/C</i>
10-00	10-00	10-00	10-00	10-00	10-00	10-00
20-00 or dusk NO NIGHT FLYING	16-00	16-00	16-00	20-00 or dusk NO NIGHT FLYING	16-00	13-00

Or put another way:

<i>Quiet / Electric – NOW everyday of the week</i>		
Monday	10-00	20-00 (or dusk) NO NIGHT FLYING
Tuesday	10-00	16-00
Wednesday	10-00	16-00
Thursday	10-00	16-00
Friday	10-00	20-00 (or dusk) NO NIGHT FLYING
Saturday	10-00	16-00
Sunday	10-00	13-00

<i>Electric & I/C – Five days a week</i>		
Monday	NO FLYING	
Tuesday	10-00	16-00
Wednesday	10-00	16-00
Thursday	10-00	16-00
Friday	NO FLYING	
Saturday	10-00	14-00
Sunday	10-00	13-00

'Bank Holiday' exceptions to the above.

Good Friday 10am - 1pm (electric and IC)

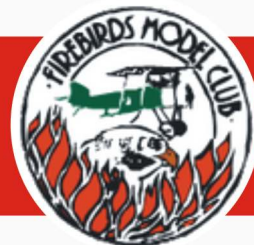
EASTER SUNDAY ... NO flying!!

ALL BANK Holiday Mondays - 10am - 1pm (electric and IC)

CHRISTMAS DAY... NO flying!!

Firebirds Model Club

News, Views & Information - August 2023



Poorly club member

Continuing thoughts and good wishes from the committee to all poorly members.

FUTURE CLUB NIGHTS - Advance notice

Following a few years curtailed by the coronavirus, it is now hoped that we can restart some of social events as we near winter, we're far too busy flying in the summer ☺.

Club Information

This section gives a summary of club services and contact details.

External Events

If you need more details on any particular event, then go to <https://bmfa.org/Contests-Events/Contest-and-Event-Calendar>.

Firebirds Model Club Committee

The following are the contact details for the Committee. Each has given permission for their phone number and email addresses to be included in this Newsletter.

Chairman	Russell Lewis	07503 153962	russell@pilot1.co.uk
Vice Chair	Peter Clark	07867 557964	psclark911@hotmail.com
Treasurer	Alan Shergold	07973 221915	alanshergold@hotmail.co.uk
Secretary	Rob Cope	07795 996549	copes02@ntlworld.com
Flying Site Rep.	Paul Brown	07730 202510	paulprb@gmail.com
Safety Officer	Geoff Griffiths	023 9265 5931	ggriffiths@hotmail.com
Membership Sec.	Paul Brown	07730 202510	paulprb@gmail.com

General contact e-mail address - firebirdsmodelclub@outlook.com

Firebirds Constitution and Rules.

The Firebirds constitution and rules document can be found at the bottom of the 'about us' section on the web-site or by clicking the following link.

<http://firebirds.org.uk/onewebmedia/FIREBIRD%20CONSTITUTION%20%26%20RULES.pdf>.

Remember... Safe flying is no accident.