Firebirds Model Club

News, Views & Information - October 2021







Dear Fellow Firebirds Club Members

Another Newsletter already!

Somebody said to me the other day, that the reason some members don't let me have things for the newsletter is because they don't feel that their writing skills are good enough. Please, if this is you and you have something to write, just write it, I can tidy it up, check the spelling etc.. (And before anybody says it, I know there are often spelling mistakes and typos in the Newsletters, even after I have checked them!).

This last month I have been trying to look after my batteries and fully confess that some of my batteries had been left charged throughout the whole of the two lock-downs, which is not good, so.. following the advice in August's newsletter I set about putting all my batteries to storage voltages.. Which was easier said than done as, although my battery charger has a 'storage' option it can only discharge at 1 amp and trust me it takes a very long time at 1 amp to flatten a fully charged 4000Mah battery to storage voltages.

And then I start thinking, it is going to take me ages to flatten and then charge every battery every session, what a pain being good could become, but I may be wrong, **I just need to fly more!** Here's the theory.. If I go to the field with 5 charged batteries and I only fly once I have 4 batteries to flatten, if I go to the field with 5 batteries and fly 5 flights then I have 'Zero' batteries to flatten.

So, in practice, a fully charged Li-po battery (cell) has a voltage of 4.2V (12.6V on a 3S battery) and an ideal storage voltage is around 3.8V which is about 40-45% of a batteries capacity, so all I need to do is time my flight lengths to leave 40-45% of my batteries capacity unused and I need to do nothing extra.

Or did everybody else know that already.

Bye for Now

Chris.



Russell gives it 'WOT 4'

More than a year ago Tony Knight was selling some models, one of which was a proper Balsa Wot 4, Russell bought it and until now hadn't flown it... after just one flight it has become his 'go to' model, he says it flies beautifully.



A Beautiful Sky

Normally I would crop out the sky to show a model in close up, but in this instance, I had to leave the sky in, what a beautiful sky... and of course a beautiful Ripmax Spitfire flown by Pete Clark. It was good to see Pete who has been really busy with his Bees during the summer, Pete also has some of this year's local honey for Sale if anybody wants some.



A KIK Reminder

When having a conversation with somebody on KIK do not use the group 'Firebirds' chat, chat with the individual... individually...



New member and a Maiden flight

We had an e-mail last month, it read..

Hi Can you help?

My brother starting building a 2M Sonata E glider about 25 years ago and it had never been finished. Looking for things to do during lockdown I took it over and got it completed, which I really enjoyed. It is now ready to fly (hopefully!) and I am looking for some help with a maiden flight before the winter weather sets in.

Do you have anyone in your club who might be interested in taking it on and helping me with a test flight.

Thanks and regards. Nigel

Sure, we can help and after a few days and a quick phone call to confirm details our Geoff is about to take control of Nigel's model. Photograph above shows the model about to 'maiden' with proud 'second-stage' builder Nigel. A successful first flight and landing was accomplished and even involved Nigel taking the controls for a few moments. Unusually the design has an elevator on just one side of the rudder which took many by surprise, but it didn't make any difference to the way the model flew. Nigel has also now joined the club. Welcome ③









Safe, but So So Noisy

Following Pete's second shed fire caused by charging Li-Po batteries, many of us have stopped (very sensibly) charging our batteries indoors. Although for me this did represent a bit of a problem, I have noisy chargers..

Noisy chargers? Chargers don't make a noise? Well Mine do!

While charging indoors it didn't matter, but when they finish charging my chargers let out a series of loud beeps and when you are charging your batteries in the garden late at night, ready for tomorrow mornings flight's the noise is surprisingly loud and as I can have several batteries to charge this can go on until quite late. So..



I removed the covers, found the Piezo Buzzer ... and muted it with 3 layers of Gaffer tape.. Much Quieter now!



Normal warnings apply, if you do this, it is at your own risk, and no responsibility is accepted by the club, the author or the editor of the newsletter, perhaps we should recommend you don't do it, unless you see somebody do it on YouTube , in which case it is probably OK ③

DON'TFORGET !

DON'T BUY ANYTHING MODEL RELATED UNTIL YOU HAVE SPOKEN TO 'OUR' KEVIN



Kevin still has boxes of Motors, servos, batteries, receivers and more.. All for Sale!

Contact Kevin direct on - 07756 403 119 (he only lives in Eastleigh)



CENTER OF GRAVITY (CG): HOW TO BALANCE YOUR RC PLANE - From Hobbyking

Center of Gravity – abbreviated as CG or CoG – is a crucial concept that is often overlooked by many beginner RC pilots. When not properly balanced, your aircraft will have adverse tendencies making it uncontrollable, unpredictable, and ultimately, poised for a disaster.

Below we will look at the importance of CG, and how you can perfectly balance your RC plane for optimum flight.



Understanding CG

The concept of CG is very simple: it is the "balance" point on your RC plane where all mass is centered and concentrated. Highly regarded as the single greatest factor influencing how an aircraft handles in the air, adjusting the CG can make an initially poor handling plane fly great, and vice versa.

If your CG is too far back, you will have a tail-heavy plane. On the other hand, if your CG is shifted too far forward, you will have a nose-heavy plane. As the saying goes, "A nose-heavy plane will fly poorly; a tail-heavy plane will only fly once."

Nose-Heavy Plane

A nose-heavy aircraft will exhibit some or all of the following symptoms:

- · Requires constant elevator input for level flight
- · Feels heavy on the sticks and may be slow to react
- In a banking turn, the nose may dip
- · Landing speeds tend to be higher making landings more difficult
- · Aircraft will dip into a dive with no throttle input and harder to recover from a stall

Tail-Heavy Plane

A tail-heavy aircraft will exhibit some or all of the following symptoms:

- Tends to feel overly sensitive on the sticks
- · Generally very twitchy and hard to control
- · Flies with nose high like its always trying to gain altitude
- Easily falls off to one side
- · Glide is almost non-existent resulting in a "tail-dive"

Determining The CG

In theory, CG is referred to as the "single point" where your aircraft is in longitudinal equilibrium, however, in reality, the CG lies within an optimal range which is also known as the stability margin. Slight deviance within this margin is acceptable, yet, once you place the CG outside, your aircraft will either be too nose-heavy or tail-heavy.



Most commercial RC planes will have the approximate CG either labeled on the plane itself or indicated in the user manual. Generally speaking, the CG point is around 1/3 of the wing chord and will likely be given in terms of the distance back from the leading edge of the wing, or from the nose of the aircraft. Using these indicators, you can easily see if your plane is properly balanced and ready for its maiden flight.

Before determining the CG, it is important to note that your RC plane must be ready for flight with all components – servos, receivers, and batteries – intact.

The Finger Method

One of the quickest ways to determine the balance of your plane without any tools whatsoever is by using your fingers. Referring to the user manual, measure and mark out the position of the CG on both sides of the wings with some masking tape or adhesive markers.

Based on the CG markings, use your fingertips to balance and hold up your aircraft. If the nose points down, try adjusting the battery back to the tail. If the nose is pointing up, adjust your battery slightly forward. For optimum results, a slightly nose-heavy plane is what you should aim for.

The Finger Method will slightly differ depending on the wing placement of your aircraft. For high-wing planes, balance the aircraft upright; for low-wing planes, balance the aircraft upside-down (inverted); and for mid-wing planes, you can choose either one. If you find that your battery pack is in a fixed position and cannot be adjusted, you can try using some stick on weights to offset any disequilibrium. While this is usually not recommended as heavier planes will have faster landing speeds, higher stall speeds, and ultimately, reduced performance, sometimes it is inevitable.

CG Balancing Rack

Another popular method to determine the balance of your aircraft is by using a CG Balancing rack. A balancing rack will save you a lot of time and is much easier to use compared to the Finger Method. While both are based on the same concept and will ultimately yield the same results, a balancing rack enables



you to adjust the weight around your aircraft as you go. All you need to do is to measure out the CG point with the built-in rulers, adjust the docking port, and start moving the components of your plane until it is perfectly balanced.

You can also make a balancing tool yourself. As long as your plane can be balanced on two points - one under each wing - you have a balancing tool.



We still have a Cornwall Correspondent!

Some may remember in the August Newsletter (following the purchase of a ridiculously, large Radian XL 2.6m powered glider from Kevin) I wrote,

[THIS IS A PLANT:] (to see if he still reads our newsletter) One of our clubs ex members 'Nigel Argall' moved down to Cornwall.. I wonder if next time I visit my aunty (in Cornwall) he could show me how to throw it off a cliff (and preferable get it to come back).

Well, he does still read the Newsletters and replied...

Ha!

Challenge received. I DO still read the letters and anyone who wants to join me in throwing a model off a cliff is ALWAYS welcome!! Definitely the best sort of flying.

Nigel

I just need a van and a spare few days and I am on my way.

Good to know we have some distant readers and thank you for your reply.

Ken from PADMAC, is he still a reader ?

I remember Ken from PADMAC, he used to read our Newsletters occasionally, are you still here Ken? It would be good to hear how PADMAC has fared during the lockdowns? And I hope you don't' mind I nicked the next piece off of your web-site. (Although I corrected the spelling mistake (3)).

Mandatory Occurrence Reporting – information 'nicked' from PADMAC site

The <u>model aircraft Article 16 Authorisation https://rcc.bmfa.uk/article-16</u> includes a requirement for remote pilots to report certain accidents, serious incidents and other occurrences to the <u>Air Accident Investigation Branch</u>

<u>https://www.gov.uk/government/organisations/air-accidents-investigation-branch</u> (AAIB) and the <u>Civil Aviation Authority https://www.caa.co.uk/home/</u> (CAA). For futher information about mandatory occurrence reporting see the <u>BMFA guidance</u> <u>https://rcc.bmfa.uk/art16-occurrence-reporting</u>.

If you have been involved in an incident and are not sure whether it is a reportable occurrence, or who to report the occurrence to or you need to report an occurrence, you should immediately visit the <u>BMFA reporting portal https://reporting.bmfa.uk/</u> which will guide you through the process. (Sorry the links are a bit messy, but it ensures that they work)



Firebird's BBQ it actually happened!!!.

So, at fairly short notice on the 18th September 2021, we managed to have a Firebirds Barbeque, a BIG thank you to Alan and his wife for all your hard work.



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Training using wireless buddy system...

Just look at the concentration on their faces, thankfully they are both looking in the same direction! I wasn't sure what the caption could be, my first thought was 'from you to me, from me to you' ?

I know Paul is doing really well with his flying and is currently practising solo landings, I am sure he will soon be flying on his own.

I am sure Paul would like to thank Keith for giving him plenty of stick time.

Well done both of you.

Flying strip changes...

Here you see Rob and Russell 'tweaking' the flying strip.

The idea is that by moving the strip to the left and slightly forward that our model flying will be kept further away from the road and the power cables.

The committee will draw up a new out of bounds map in due course, but for now is asked that we fly more to the left and less to the right (as you look out from the pits).

Please do ask a committee member if you need any more information.

Watch out, he's doing it again...

Alan Shergold has been getting 'it' out again ...

... so, if you don't want to be the comedy act in the Firebirds movie, make sure your take-offs and landings are nice and smooth while the camera is out!













And while we are talking about Alan...

Alan Shergold is also one of the club's most prolific model makers and the 25th September 2021 saw another maiden flight, this Ben Buckle Buccaneer model built from plans, was initially too responsive to rudder input but once this was realised, she became a beautiful, slow and docile flier.

Alan took the controls whilst the model was in the sky, but our (now official) test pilot Geoff took off, trimmed out and brought the model safely back to the ground.





Well done Alan, another Triumph.



Geoff Flies one of his own models (for a change).

As many would notice, this Wot4 is not in the official WOT 4 colours as, following a leaky pipe on the fuel tank the previous covering became damaged, so Geoff completely recovered the model (easier said than done!) ...

Many down the field said that they actually preferred the new colour scheme to the original. The quality of the re-covering is perfect and as expected she flew just as well as she did when she was new.





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MAX

BOAT SECTION - only going forward!

Chris Fisher... The mighty 'ship' Continued.

With the rubbing strake now fitted around the Gunwale, I set about the final job, I just needed to programme the ESC to do both forward and reverse. I had already found the instructions for the ESC and all I had to do was wait for "beep-----beep-beep-beep-" (a long sound and three short) which indicates the Rotation Direction... but for some reason my ESC never made that sound... so, for now I have a forward only boat.



<---- Fore "A View inside the Great ship" Aft ---->

I had a little bit of damage on the tip of the bow, and my original plan was to put half an old R/C tyre on the front like the working boats you see in Cornish fishing villages... but it looked really naff..

So... Although it only looks marginally better this is the new bow fender, modelled from



black hot melt glue which also holds the rubbing strake firmly in place.

I may have to introduce it to some water soon (I think I said that last month too!)!



Something to do if it's raining

Suggested by Russell, who has attended in the past both as a seller and a buyer (as have several other members) the reports are always good from this event.

Southern Counties Autumn Swapmeet, Mountbatten School, Romsey, Hampshire, SO51 5SY.

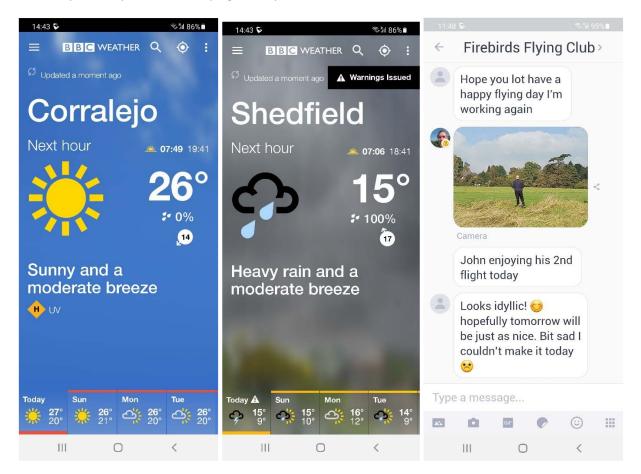
From 08:30am till noon with over 50 tables. Admission only £4, under 16s free. First table costs £9 (including one admission), additional tables cost £5 each. Refreshments will be available.

More details and latest news

https://events.bmfa.uk/event/club-event-southern-counties-autumn-swapmeet

And Finally..

... for those that know me well, and what I am up to, I thought I would get a smug feeling by sending you the follwing 2 screen grabs taken at the same time, on the same day at the beginning of October then.... I started seeing posts on KIK.. Looks like you (smug lot) are still having some great flying days. Trut me. you really miss model flying when you can't !





NEW Flying times : (from 19 July 2021)

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
					Electric & I/C until	
					2pm then Quiet /	
Quiet / Electric	Electric & I/C	Electric & I/C	Electric & I/C	Quiet / Electric	Electric until 4pm	Electric & I/C
12-00	12-00	12-00	12-00	12-00	10-00	10-00
20-00 or dusk				20-00 or dusk		
NO NIGHT FLYING	16-00	16-00	16-00	NO NIGHT FLYING	16-00	13-00

Or put another way:

Quiet / Electric – NOW everyday of the week					
Monday	12-00	20-00 (or dusk) NO NIGHT FLYING			
Tuesday 12-00 16-00		16-00			
Wednesday	12-00	16-00			
Thursday	12-00	16-00			
Friday	12-00	20-00 (or dusk) NO NIGHT FLYING			
Saturday	Saturday 10-00 16-00				
Sunday	10-00	13-00			

Electric & I/C – Five days a week					
Monday	NO FLYING				
Tuesday	12-00	16-00			
Wednesday	12-00	16-00			
Thursday	12-00	16-00			
Friday	NO FLYING				
Saturday	10-00	14-00			
Sunday	10-00	13-00			

'Bank Holiday' exeptions 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!!



Poorly club member

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

FUTURE CLUB NIGHTS - Advance notice

ALL ** Postponed ** due to Covid 19 restrictions.

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 <u>https://bmfa.org/Contests-Events/Contest-and-Event-Calendar</u>.

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	023 8056 1397	russell@pilot1.co.uk
Vice Chair	Vacancy		
Treasurer	Alan Shergold	07973 221915	<u>alanshergold@hotmail.co.uk</u>
Secretary	Rob Cope	07795 996549	<pre>copes02@ntlworld.com</pre>
PRO	Peter Clark	07867 557964	psclark911@hotmail.com
Flying Site Rep.	Vacancy		
Safety Officer	Geoff Griffiths	023 9265 5931	gcgriffiths@hotmail.com
Membership Sec.	Keith Warwick	07887 486040	keithw11@hotmail.co.uk

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.