



# *Kendal Flyer*

## *Newsletter of the Kendal Model Aero Club*

October 2009

Hi everyone! It's the beginning of October and we're approaching the end of the flying season – you know, that period of blue skies, warm sun and balmy breezes that seems to have been in short supply this year. You can of course carry on at the field if you don't mind frozen fingers and toes, or alternatively, you can take advantage of the winter indoor programme and stay warm! The indoor flying, as usual, will be at Dallam School, Heversham on the following dates:

Sunday October 18<sup>th</sup>  
Sunday November 15<sup>th</sup>  
Sunday December 13<sup>th</sup>  
Sunday January 17<sup>th</sup>

Sunday February 21<sup>st</sup>  
Sunday March 21<sup>st</sup>  
Sunday April 18<sup>th</sup>  
Sunday May 16<sup>th</sup>

The times for all dates are from 4.30 to 6.30 pm and everyone is welcome.

Here also is advance notification of the date for the AGM which will be held at the Gilpin Bridge Inn on Thursday November 26<sup>th</sup> 2009, at 7.30 pm. Please make a note in your diary for all these dates now!

So, what's been happening?

### Events

Windermere Air Show. This event, held at the end of July, was at least blessed with good weather on the Saturday. Great interest was shown in the static display and the guys manning the stand did a valiant job fielding the questions from the public. The flyers put on an excellent display, demonstrating fixed wing and helicopter aerobatics plus Richard Lee's superb scale Air Ambulance turbine helicopter. The Rotary Club have thanked the club for its efforts and invited us for a repeat performance next year. Well done to all concerned!



**The club stand**



**Some of the guys who made it happen!  
(pic from J Alderman)**

The Event Day. Despite the billing, this day turned out to be totally uneventful. However, with the fine weather a good club day was enjoyed by all the many members who attended.

### Training

Two more members have now successfully passed their 'A' Certificate, namely Gill Saunders and Geoff Ducker. Both are regular flyers becoming ever more competent with each visit to the field. Well done to you both!

Remember, if you would like some instruction, or assistance in any way with flying your models, give Brian a ring and help can be arranged.

### A bit of Electrickery

There's no doubt that electric motive power, at least for the small to medium sized models, is now mainstream for all model flying. This is due to the tremendous development in brushless motors, electronic speed controllers and of course the Lipo (Lithium polymer) battery. The advantage of Lipos is their very high power density i.e. amount of energy stored per unit weight. In practice this means that a Lipo is less than half the weight of the equivalent Nimh battery. So in flying terms, a 4S 3000 mAh in my 4lb E-Flite Eratix, gives well over 10 minutes of 3D flying with a good vertical performance.

However, Lipos will not take much abuse if you're looking for a long service life and if severely abused, will self ignite with potentially disastrous consequences! Much has been written about the 'dangers' of Lipos and pages of warnings issued with some Lipos may make you wonder if they are safe to use at all and has given rise to much discussion at the field.

I believe, though, that without under-estimating the possible dangers in any way, by adopting a few simple procedures, the dangers can be minimized and a long life ensured.

1. Always use a dedicated Lipo charger, always balance charge and double and triple check that you have set the charging parameters correctly for the battery being charged.
2. Always use a Lipo enabled ESC in the model and set the low voltage cutoff to the highest possible, usually about 3.1 volts per cell.
3. Always operate the battery well within the manufacturer's stated limits. A 3S 2000 mAh 20C is rated to give 40 Amps (but only for 3 minutes!) and at this continuous current drain will get very hot. Downrate to 10C and draw only 20 Amps and the battery will only get warm, give longer flying time and have a much longer life. High temperature is a killer.
4. Always time your flights and try to land with no cell in the battery lower than 3.7 volts.
5. Always keep your batteries cool and for long term storage i.e. over winter, only half charged.
6. Never short circuit, puncture or drop your batteries and try to give them some crash protection in your model.

So, with a little care, your Lipos should give good service with charge cycles measured in the 100's. One final comment – the price tag on a Lipo battery is in no way connected to its quality, performance or longevity! If you have internet access, go to [www.giantcod.co.uk](http://www.giantcod.co.uk) click on 'Lipo Battery' under 'Categories' then read some of the postings under 'Related Forum Posts'. Very interesting!

Finally, this electrickery can be very confusing if you're not acquainted with volts, amps, ohms and watts, but if you want to have a go, just ask! I don't claim to know all the answers, but there is now a lot of electric flight experience within the club, so someone will always be able to help.

### At the Field

In the last newsletter, Gill Saunders described how she decorated her Wot Trainer. I hadn't realised that Crafty computer paper market both an adhesive vinyl and a waterslide inkjet printable paper and Gill had used the vinyl type. I used the waterslide variety to finish my Tucano in the colours of ZF717 from 207 Squadron. I've now tried both and think the vinyl is easier to use, but the waterslide will take compound curves more easily. My only criticism is that the white eg. in the roundels, is not very dense.

As regards models, a good mix of sport/trainer types are regularly flown and Brian, Martin and Robert continue to entertain with their extreme aerobatics. Peter Dowker has successfully flown yet another own design EDF, this time a BAe Hawk which flies most realistically. Unfortunately, no pictures as yet. I've been getting to grips with my Eflite Eratix 3D which is so easy to fly and has proved totally vice-free.

Finally, here's a few pictures of models seen at the field this year to remind you that we have had some excellent flying weather.

Happy Landings!

*Dave Neighbour*



**Club members  
get together on  
the Event day**



**Pete Dowker's successful Long Eze**



**My Tucano in 207 Squadron colours on its  
take-off dolly**



**Richard Harrison's fantastic Walrus**