

# WESSEX AEROMODELLERS Low-cost 600RES LEAGUE

600RES winter summary – March 2016

After just one season using the brushless motor the weight saved and the extra revs achieved have transformed the 600RES models performance. It was always my plan that any change in the power train would not make existing models obsolete overnight. I am pleased to report that this has been achieved and for example an original Apollo, with extended nose and careful construction to minimise weight, remains a fully competitive model. That's a model that was a free plan (by Peter Kessell) in the May 2006 edition of RCM&E, just about 10 years ago. In July 2014 RCM&E also published another design the Red Eagle that has also been built and used recently as a 600RES model (in order to save some weight it might be worth slimming the fuz down).

Wing spans seem to have settled in the 1900mm – 2300mm region but whether to have a sheeted leading edge or not seems to be one debate that would appear to remain unsolved. I've tried both and so far have not been able to tell the difference. Also to my surprise "lightweight" covering material adds more weight to a model than I would expect. Has anyone accurately weighed the covering process of a complete model? It remains important, as it always was, to make sure you charge up the battery fully before each flight, it also needs to be kept warm, as all batteries seem to require, in order to perform well.

So over the winter I hear from Glenn Woodford that *"I'm staying with the original design just going to referb my existing models, relying on improving my flying skills."*

From Ken Wisker who has built two models the Apollo and a Gentle Lady:

*"I had just returned to aeromodelling after some 65 years, the elegance of a glider has always been appealing, and the 600 RES looked an attractive proposition. Chris lent me the plans for the above which I duly copied, and started building an Apollo. Not being used to laser cut components I set about cutting out the many ribs aided by the suggested jig. Another useful idea given was the use of double thickness hacksaw blades to notch the trailing edge. Not understanding the requirements for a V tail I copied the Gentle Lady fin and tailplane. The model flies well in the hands of an expert, and even I can keep it in the air on a good day.*

*Having completed the Apollo I decided to build a Gentle Lady. The wing looked more robust and better suited as a training model. The dowel and screw fitting of the Apollo was appealing so I deleted the main dihedral to give a flat centre section. The plans did not give details for electric power so I added an Apollo nose. It has made several flights with a brushed motor, and has currently been converted to brushless power. First flight in this mode is awaited.*

*Building the two planes from scratch was great fun, and allowed me to regain modelling skills as well as learning new ideas on the way. 65 years ago who would have thought that a multi function radio controlled electric powered glider was possible."*

Thanks Ken for your comments, it has always been my intention that the models be inexpensive and capable of being built with all the normal (whatever they are!) modelling skills and materials.

Roly Nix has built two new models over the winter which are quick to construct using a c/f tapered boom (inexpensive fishing rod) and a blue foam fuselage which is simply sanded down to the required shape. One is a pusher design, the other a traditional tractor model. The servos are then inserted into hollowed out sections of the foam. As a bonus it is also not very heavy.



Roly's blue foam pusher model



.....and now the tractor version, which one will perform the best?

Ian Pratt, winner of the TH round in 2015, has continued along his unique c/f tube and rod minimalist construction technique. Ian has developed this into a fine art form and should be congratulated on his original thinking. Along with extensive wing tip development Ian's models look more competitive than ever.

Jeff Fellows continues the steady development of his already fully competitive models and writes:

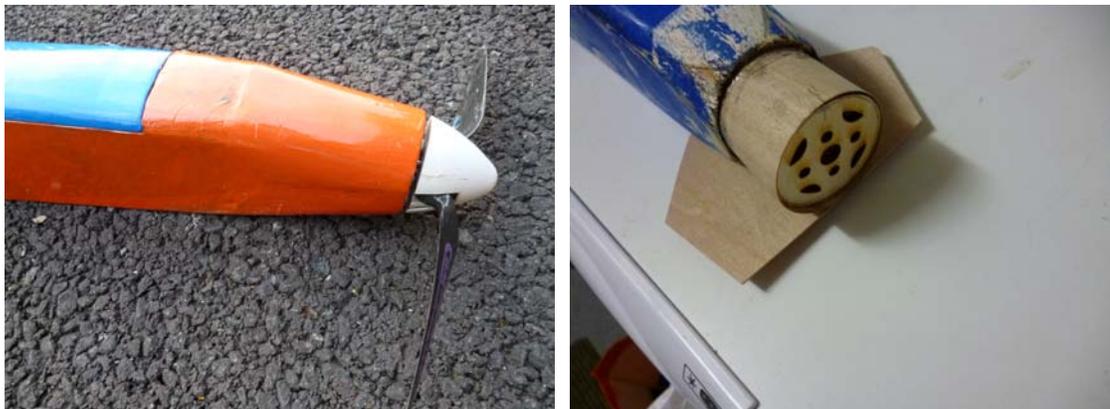
*"The main activity so far has been aimed at understanding how to improve on last year. However, two new models have been built. One is an attempt at a reduced weight model along the same lines as the others. I built all but the wings before I realised that it would not be much lighter when covered than last year's efforts. But then I used tissue instead of polyester shrink film and Solartex and found a few grams.*

*I haven't built new wings but the overall empty weight with existing wings is 566gms. If I "stole" Andrew's lightest wings that would go down to 532 gms (wings = 224gms ) so there could be more to come."*

John Bainbridge, always wanting to be different, has produced a model with a profile fuselage see photos below. John Taylor built a superb model to start with so no over winter modifications are required. Rick Churchill is updating his model and we have several new contestants building suitable models and hoping to join in soon.



Malcolm McKendrick has continued building experimental models and come up with a model that looks competitive.



Apollo extended nose, using 0.4mm ply, to suit the lighter brushless motor



Ian's minimalist c/f tube model



Mylar covering



Tissue over mylar

Weather permitting we have a practice day at Tarrant Hinton on Saturday 5 March, look out for a confirming email on Friday. Lunch in the Cashmoor Inn afterwards so I will need to know if you are coming or not in order to let the Pub know the numbers.

Round Robin, Round 1 is at Cashmoor on Sunday 24 April. The monthly postal competition also starts in April.

Happy thermalling,

Chris Hague

1 March 2016

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