TRAINS, MODELS AND HOBBIES

High Street, Bognor Regis

Offer a 10% discount to CADMAC Members on all new aero modelling items. A current membership card must be shown.

Contact: Alan Wickham on 01243 864727

SUSSEX MODEL CENTRE

57 - 59 Broadwater Road, Worthing Offer a 5% discount to CADMAC Members on some items. A current membership card must be shown. Tel: 01903 207525 smc@sussex-model-centre.co.uk

FLITEHOOK

For all your indoor and free flight needs. Individually weighed balsa, spruce and plywood. Props for all disciplines, adhesives, electric & C/O2 motors, IC eng, don't forget the fuel! Hundreds of kits for all types of flying enjoyment (inc Ben Buckle). See them all at club and indoor meetings or contact Pauline or John on: 023 8086 1541 Email:pauline@flighthook.freeserve.co.uk

The articles and views expressed by our members, are not necessarily the views of the editor or committee and therefore we reserve the right to modify and or refuse an article if it is considered in the best interest of the club.



Chichester and District Model Aero Club

Committee 2003

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All items for the newsletter should be submitted to:

Mr. Bruce Smith,

The Aylings, Queens Avenue, Chichester, West Sussex, PO19 8QB Email Address: aerobruce@aol.com

> Visit the club's excellent Web Site, http://cadmac.virtualsite.co.uk

Cover photograph:

The new Ikara Butterfly, as demonstrated at last month's club night Indoor competition. Photograph courtesy of Tony Chant.

STOP PRESS

CONGRATULATIONS

To club-member Anrew Gibbs on achieving his second major article publication in QFI within three months. Following his 'Centre Spread' of 'Winter Electric Fly-in' in the February edition, now he's grabbed three full colour pages this time with his Jeti Powered Fun-Fly article in the May edition.

FOR SALE

Phoenix Models Canary Trainer - partly constructed in original box MDS 45 Engine - in box - never mounted Both items but excluding any radio gear - £100.00

> Contact Mrs B. Walton - 01243 542466 email: biruta1@btopenworld.com (Westergate - Chichester)



PHOTO COMPETITION

The challenge is to produce a picture representing:

'The Spirit of CADMAC'.

It can be an old or recent photograph, a static model, action shot, fly-past, in the air action, or perhaps a group of club personalities enjoying an event or outing - whatever portrays being involved with CADMAC.

The competition will be judged in January 2004 and there will be a token prize for the winners at the Thursday club meeting. So get snapping, or sorting through old albums and get those entries in. Just post them, email them or hand them in by the December 2003 club meeting. Every quality photo will be placed in the photo gallery on the CADMAC website, and the best ones will find their way onto other web pages, and into Clear Dope.

RULES OF ENTRY

- The competition is open to any CADMAC member.
- Multiple entries are allowed.
- Last entry must be received by December Club meeting.
- Pictures can be black & white or colour prints or digital images. Prints can be chemical, InkJet and digitally manipulated prints are acceptable.
- Slides & transparencies are *not* acceptable.
- Entries can be handed, posted or emailed to the judge.
- Only entries with a stamped addressed envelope will be

returned by post, otherwise they'll be handed back at a future club meeting.

- Entries should include a short title or descriptive text - what, why, where, when, how.
- Prints no larger that A4 (21x29.7 cm) please.
- Attach you name and address to every print.

Every care will be taken with your photos but no liability can be taken for loss or damage however caused.

CADMAC reserve the right to free reproduction of entries in club related material. The prize is a token trophy to be presented at the January Club meeting. No cash prizes are involved.

The competition judge's decision is final and no correspondence will be entered into.

Entries to:

Tony Chant CADMAC Photo Competition 27 Kennilworth Road Bognor Regis West Sussex PO21 5NE

Email: tony@tonychant.freeserve.co.uk

Phone: 01243 828506

Girl killed in model aircraft accident

[You may have just missed details of this tragic occurrence which were reported on TV, radio and in the newspapers. Ed.]

On Tuesday 15th April a thirteen year old girl died after being hit by an out of control R/C model aircraft on Dartford Heath in Kent.

Tara Lipscombe was out walking with her sister and mother at about 5pm on the heath when she was hit in the head by the model, one of the popular Chris Foss designs, an Acro-wot. According to witnesses the aircraft's engine began to missfire and then it just rolled over and went into a dive from a height of over 300 feet. Emergency services were summoned and Tara was flow to the Derwent Valley Hospital in Dartford but tragically died three hours later.

The Acro-wat was being flown in a designated area by a friend of the owner at the time. He had not been trying to land it and could not explain why it had gone out of control. Dartford Council has suspended all model flying in the area until further notice and is waiting for the results of a police investigation.

A post mortem was due to be carried out on Thursday 17th April pending an inquest.

Editorial

Recent tragic events must serve as a dire warning to all who fly powered models of whatever discipline. Our hobby may enjoy a low insurance weighting as a result of a variety of factors but at the end of the day any powered model aircraft has the potential to become a lethal missile and we must ensure that we do, **and are seen to do**, everything within our capabilities to maintain and fly our models in a safe manner.

I think we could all benefit by taking stock, for a moment, of what the consequences might be if we were involved in a serious accident.

There would, no doubt, be an inquest and if the finger of blame were pointed at YOU, you could be certain that a whole variety of expert witnesses would be used to question your routine and every aspect of the events leading up to the incident.

With this in mind; cast your mind back to the last flight you made, and answer these questions, where applicable, brutally honestly to yourself: Did you follow, exactly, the club's

peg board procedure? Did you **check** the on-board Rx NiCad status before you started to

fly? Did anyone observe you doing this? Did you carry out post flight checks following your previous landing? Did anyone observe you? Did you carry out pre-flight checks? Did anyone observe you? Was your aircraft in a good flying

condition?

How long is it since you carried out a range check with that model and transmitter?

Did you carry out an 'adjacent frequency' check, if applicable? Is the receiver aerial positioned to obtain maximum signal strength? Has it ever been shortened? Could metal/metal linkages generate frequency interference? Have you taken steps to insulate the Rx from any on-board interference? Did you experience an glitching without landing immediately to check out your systems?

Did you make all the requisite pretake-off calls and check for a clear take-off zone including above and behind?

Were you flying from within the pilots' box?

Were you seen to be flying clearly within the designated flight zone? Could your flying have been described by members as hazardous? Were you in a fit state of body and mind to fly the aircraft?

Have you read and acted upon all the newly published safety instructions highlighted in the BMFA Members' Handbook and the CADMAC pilots' handbook?

It could be said that we perform many of our actions on the flying field purely out of routine and that we routinely fail to perform many actions we perhaps should. Invariably we get away with it. Infrequently we have a close shave. Rarely we have an accident and then hopefully it's only the model which suffers. At the end of the day, though, WE are responsible for the safety of others and ignorance of our own rules or BMFA Safety Codes is no excuse in law.

At any time any one of us could be involved in a serious crash, involving either property or persons. Allegations of dangerous flying or negligence could be made against us and if it could be shown that we had not observed our own organisations' safety procedures, then far from being deemed **'an accident'** it could well result in criminal proceedings against us and in the tragic event of a fatality possibly even **manslaughter!**

REMEMBER Article 64 of the Air Navigation Order states:

'A person shall not recklessly or negligently cause or permit an aircraft to endanger a person or property.' In other words you don't have to be deliberately doing something dangerous to be breaking the law!

The next time you get a 'rollocking' from the club's Safety Officer don't be too quick with your 'robust' defence. Remember he's only doing his job in looking after the club's and your interests. He's not been elected to spread sweetness and charm or partake in an old buddies act. He's been elected to keep us all on our toes. Now why do you think we need that?

+++++++

Following a near emergency on the Thorney Island site when a junior member (under the club's locum paretis) was taken ill, our committee has been considering it's responsibilities in such a situations, or when a more severe medical emergency might occur.

If, for instance, an unaccompanied junior was involved in a serious accident and required hospitalisation or immediate medication, a 2.Flies faster than normal or expectation.

3. Prone to diving.

4.Sluggish elevator response.

5.Requires a lot of up elevator when flying inverted.

6.Reluctant to spin.

7.Restricted acrobatic performance.

Centre of Gravity too far back

I. Requires excessive down trim. 2.Model gets 'blown back' easily (poor penetration).

3.Unstable in pitch i.e. cannot find suitable elevator trim position.

4.Prone to diving (result of a flat stall).

5.Twitchy elevator response.

6.Has a tendency to enter a spin when slowed down in a turn.

The elevator movement also needs to be set-up correctly although the main danger here is too much rather than too little. Too much elevator movement can result in the tailplane being stalled during aerobatics. A tailplane stall is recognised as a flick roll in the pull up for a loop or a slow roll at the bottom of a bunt on the application of more down elevator. Both can be very disturbing if you are not expecting it.

Happy Slope Soaring





Chairbourne

With the hope that better Trundel weather is on the way, I've been getting my slope soaring models out of the loft and preparing them for their first flight of the season. In doing so, I am reminded of the following comments and advice from Stan Yeo, the slope soaring guru and boss of Phoenix Model Products :-In reply to the question "What is the most frequent problem encountered by purchasers of his range of gliders and slope soarers?" Stan makes the following observations :-

The vast majority of his customers experience no difficulties at all with the performance of his models but occasionally he gets a telephone call asking for advice. Welcoming any opportunity to talk to his customers, he invariably finds that the problem is due to incorrect set-up of the controls or incorrect Centre of Gravity position. Also he finds that a lot of modellers do not know how to trim their model to get the most out of it. He therefore includes the following advice in the instruction leaflet that comes with all his kits.

TRIMMING FOR PERFORMANCE

The control set-ups given on the plans are conservative. The reason is that two conflicting groups of modellers have to be catered for, namely the inexperienced and the



Stan the man with PMP Wingbat.

experienced. Consequently control responses are set mid range and can be increased if required. Also the Centre of Gravity (CofG) can be moved back a fraction. Do not attempt to re-trim your model until you are confident with it and if you do re-trim your model only adjust one setting at a time and keep notes. Below are a few notes on how to recognise an incorrect CofG position. The model will not necessarily exhibit all the symptoms mentioned.

Centre of Gravity too far forward.

I. Requires excessive up trim

whole raft of responsibilities would become incumbent upon the club: Immediately, an on site member would need to take charge of the situation, possibly to render first aid; Immediately, parents or responsible adults would need to be informed, possibly no contact could be made; Immediately, emergency services would need to be summoned and subsequently, at Thorney, the security gate-house would need to be informed;

Para-medics and hospital staff would need to know of possible underlying medical conditions, allergies, drug intolerances and even any parental objections to certain forms of treatment on religious grounds. They might need parental permission to commit a 'junior' to hospital or anaesthesia and hospitals would need all the relevant home details to source correct medical records.

At their meeting of Tuesday 29th April, the committee concluded that there were only two ways by which all the relevant details and permissions could be made available on site at any time: (where such a jun-

ior may be present)

Either, that having been collected and collated, all the relevant details were presented by a nominated club officer (or a fleet of same) at every club flying site, at every available flying opportunity; or that junior members, when unaccompanied at any flying sight, be required, as a condition of membership, to carry a card containing such details and permissions, completed and signed by parents/guardians..

Since the former was not a viable option the committee adopted the principle of a **Medical Emergencies Information Card** for junior members and hope to launch this shortly, initially as a voluntary measure.

Ame

Chichester & District Model Aero Club	Member's contact details Name: Date of birth	Blood Group (if known) Please list any medical condi- tions which should be noted.	In the event that I cannot be con- tacted in an emergency I give per- mission for the member, named overleaf, to receive:
	Religion		(Please indicate in box provided)
	Address	Please list any prescribed	Emergency medical treatment
Second second second Second		Please list any prescribed medication taken regularly.	Anaesthetic
		• ••••••	A Blood Transfusion
	Home Phone		Signed:
S.n. 3	Parent's mob 1	Please list any known	-
	Parent's mob 2	Please list any known allergies or drug intolerances.	Date:
Medical Emergencies	Doctor's name		Relationship to member:
Information Card	Surgery Tel.		Relationship to member.
	Location		

Do you think a similar 'voluntary' card could be useful to all club members?

INDOOR COMP

This was held in the club room , on club night 10th April.

A big thanks to John from FLIGHTHOOK who kindly donated the prize, which was one of the new Butterfly models.

There were 9 people who recorded flights, but quite a few more who flew and never timed the flights.

Peter Daer's model seemed to be flying backwards most of the time while Terry had quite few with unusual shapes that flew quite quickly but he only recorded one flight.

John was first to record a flight, using one of the new Butterfly's just to demonstrate how good they are, with 42 sec. All the other early flights were about 25 sec though everybody kept trimming and getting better. Tony Chant tried hard to record a good flight but kept hitting the fixtures and fittings! We had some new faces Nigel, Graham and Alan Miller flying, all doing well, with Nigel recording a 35 sec flight.

Alan Whitt now joined in and did a 23 sec, then a 42 sec flight and Don Biles managed to do a 36 sec one, while Tony got to 34 sec, Nigel to 37 sec and Alan to 37 sec. So John came out again and put up another target of 48 sec.

This really spurred on the rest and Graham went to 46 sec, Alan to 44 sec, Tony to 44 sec and Nigel to 47 sec. It now became a matter getting the model to fly through the fan winds and not hitting the fittings or the people. Alan got to 47 sec and Tony also got to 47 sec so we had three on the same score but one sec under John.

Finally after quite some time, with lots of times between 35 and 45 sec, Alan Miller managed to come up with final 51 sec flight, and was



Club Gala Day

Bank Holiday Monday. (May 26th) At Porthole Farm.

Trade Stand	Wine	Barbecue
(Chris Collins)	Fayre	(Tony Chant)
Electric Gliders	572819	Ron Hemblade
APLD	670791	Mick Blundell
Control Line	670163	Ray Beadle
Balloon Burst	373041	Peter Sackman
Electric Free Flight	02380 789707	Andy Gibbs
Electric R/C	868163	Peter Daer
Park Flying	782922	John Riall
Scale Flight	530407	Mick Pearse & Chris
Fun Flying	263236	Alan Litchfield
Dress Up Your Mod-	670163	Ray Beadle
el	605279	Richard Farren
Fly the Longest Ban-	*	PLUS - Rubber

A GREAT FUN DAY FOR FLYERS FAMILY & FRIENDS

- ***** Enter any or all the events contact the person named along side.
- * Control line will run from the patch and will be held on its own.
- * The timing for the other events is open.
- ★ Offers of help for short spells during the day will be very welcome. Contact event organiser: Ray Beadle on 01243 670163

GET YOUR MUG IN THE MAG?

COMPETITION CALENDAR MAY - JUNE

Sat May 10 Electric Duration Sat May 17 Electric Duration 12 noon @ Porthole Farm 12 noon @ Porthole Farm

Electric Duration Rules

45 sec timed climb from hand launch. Timed glide to spot land in box. 6 min max,

Bonus 10% points for max

10% extra for touch in box. Non A,B cert flyers get the extra 10% Three Rounds to count. If any ties, fly off to be 45 sec climb, last down wins

Mon May 26	Gala Day	10.30 am @ Porthole Farm
Sat June 14	Control-line & Electrics	1 pm @ Thorney Island
Sun June 15	Loops and Rolls	1 pm @ Thorney Island

Loops and Rolls comp Rules

Schedule will consist of : take off, which is complete, when the model has finished one circuit and passed back over start point, Two right hand rolls, Straight level flight upright, Two left hand rolls, Straight level flight inverted, Two inside loops, Two outside loops, One double reversal, One double stall turn, One top hat, Rectangular landing , Touch down in box.

Manoeuvres to be called for start and finish. Marked out of 10 points for each manoeuvre Winner is Max No for One out of Two Rounds. Bonus of 10% for "A" Cert Flyers Bonus of 20% for Non Cert Flyers

Register your entry - Contact Ray Beadle on 01243 670163

All 2003 competition rules are printed in the February edition of CD.

declared the winner.

Everybody enjoyed themselves and it was interesting to see that indoor flying can be done in such a restricted place as our club house. John from Flighthook presented Alan with one of the new Butterfly kits while Bruce and Tony took some pictures for the Mag! Thanks to all who took part and to all that cheered them on. Cheers Ray

(Photos courtesy of Tony Chant)



INDOOR FLYING

MANHOOD COMMUNITY COLLEGE, SELSEY. First Thursday of the Month.

WESTBOURNE HOUSE SCHOOL, OVING. Third Thursday of the Month

Mick Blundell - Porthole Rep.

New flying times for Westbourne - 20.00hrs to 22.00hrs

CONTROL LINE AEROBATICS PILOTS' ASSOCIATION

CLUB MEMBER'S C/L SUCCESS

Following on from his excellent placings in the control-line stunt and c/l vintage stunt at last year's Nats, club member Dick Stepney ran out the outright winner in the Chihuahua vintage class at the recently held Three Kings Aeromodellers' Comp. Designed by HC Quek, the Chihuahua is a 29" span fully aerobatic c/l stunter for 1 - 1.5 cc engines. Built from what I believe to be a free Aeromodeller plan it's a very versatile aerobat, capable of all the manoeuvres detailed in the score sheet opposite including the 'square' manoeuvres where 90° rotations must be completed within a 3' radius if my memory serves me correctly! If you've never 'had hold of the



The Chihuahua designed by HC Quek.

handle' get in touch with Mick Blundell and try a trainer at the Gala Day It's a cheap and very exciting aspect of our hobby and as a very senior and experienced club member confided recently, "I've flown all kinds of R/C for years, but you never get the same buzz as when you've just started a control liner's engine and you're running for the handle."

Personally speaking there's no other model flying sensation quite like it. The model becomes an extension of the body. You feel it's pull and altitude through the fingers and wrist - I've even seen pilots flying stunts and inverted with their eyes closed - it's so tactile.

After an absence of forty years I picked up a handle, at a Fishbourne



SC summer club meet last year and was instantly hooked again! The end result, seen above, followed a long chat with Dick, who kindly loaned me the Peacemaker plan and then a trip to Flighthook who import the excellent repro 2.5 cc Oliver Tiger diesels. Dick recons it'll 'go like stink' so I'm really looking forward to it's maiden flight on the 28th - I think!

(Ed)

much improved and it was picking up lift on a cold, grey, breezy day at Thorney. Roll on summer!

How long it will be before I succumb to a brushless motor purchase. I don't know. Perhaps the prices will drop, the longer I wait. I've had a stir of the sticks with Adrian Child's brushless aerobat and was impressed with its performance. Also Ron Jeeves trusted me flying his bipe (featured in last month's CD) which was very nice but needed another one or two cell to make it hotter. Andrew Gibbs, a very informative scribe, detailed his extremely successful brushless electric fun-fly in last month's issue and it looks like electric flying is here to stay. Just think about it. Apart from Ohm's law, you can go flying in your Sunday best clothing and then go home not looking AND SMELLING like a grease monkey!

A little birdy tells me that Andrew Gibbs is writing a

series of booklets to help we 'Voltage Virgins' make sense of the 'Electric Maze.' Knowing Andrew's thorough understanding of matters aero/electrical and his attention to detail, you can be certain that he'll come up with a series of easy to read charts and comparisons to take the mathematical wizardry out of finding the correct prop/motor/current/ voltage/weight/wing-loading/ duration combination. So whether you're building a park flyer or a scale Bristol Brabazon, it'll just be a case of following them through to achieve the most efficient power train for your chosen model type. (Ed)



0 1

8



geared electric motors have the distinct installation advantage of a concentric gearbox configuration.

even more embarrassing with me being an electrical engineer - should have put 2 and 2 together! A trip to SMC for different sizes of prop found them with a limited stock but a phone call to Glider Distribution (Newark, Notts) soon put me straight on advice how to improve the Graupner SpeedGear 600 2.8:1 8.4v unit.

The first advice was that I'd have been better getting the 500 2.8:1 7.2v unit with the same 12 X 10 prop and using my seven cell 8.4v 2000mAh battery packs. To get the power out of my 600 8.4v unit I'd need to use an eight cell 9.6v pack as an 8.4v motor is 'soft' on an 8.4v pack. The simple guideline is - always use a battery pack that's one cell above the nominated motor voltage.

Eg 6v motor = (6 cell) 7.2v pack / 7.2v motor = (7 cell) 8.4v pack / 8.4v motor = (8 cell) 9.6v pack.

As a compromise it was decided to change the prop for a 13 X 10 as this would draw around 16 amps rather than the 12 amps of the 12 X

10. One thing did surprise me - I ordered at 11 am on Friday and the order was through my letter box the next day. That's what I call service. Unfortunately the SpeedGear 600 is only sold as an 8.4v unit so a 9.6v pack will have to be purchased but I'm hoping that the 13 X 10 with my existing 8.4v pack will work for the following reason: In competitions there is a '15 second less motor run' penalty for using that extra eighth cell! Oh dear! You don't think I'm getting serious about electric thermal soaring, do you? Still - I'm not the only old dog trying to learn new tricks! I heard Don Biles, who was trying out his latest geared electric motor glider, muttering something about 'an elastic band would take it up quicker!!' Its blatantly obvious that you have to prop electric motors correctly for their voltage and cells used (you can't just tweak the needle valve) and I'm not yet convinced that a geared motor is the best route for quick climbs. For an all up last down, maybe, as the efficiency of a large prop and low current drain comes into play but Oomph = amps and too many amps = a burnt out motor! Ah well I'll keep you posted on the direct drive versus geared motor saga.

My third model is fitted with a direct drive Hurricane 650 motor on an 8 X 4.5 Cam Prop just as the original model was. The first flight on a seven cell 8.4v pack was good with promising performance but a fair amount of left trim was required. However, after taking out some of the washout from the left wing with a heat gun subsequent flights were

THREE KINGS AEROMEDELLERS CHIHUAHUA SCORE SHEET

Name	F	Round No			
Draw No					
	Poor	Fair	Good	Excellent	Score
Take off within one minute	XXX	XXX	XXX	5	
Take off	1	3	4	5	
Level flight two laps	1	3	4	5	
High level flight - two laps.	3	5	7	10	
Vertical S	3	5	7	10	
Vertical climb	3	5	7	10	
Vertical dive	3	5	7	10	
Wingover	3	8	12	15	
Five inside loops	5	10	20	30	
Five outside loops	5	10	20	30	
Inverted-flight two laps.	5	10	20	30	
Horizontal eights three	10	20	30	40	
Vertical eights three	10	20	30	40	
Overhead eights three	10	20	30	40	
Square loop	10	20	30	40	
Three leaf clover	10	20	30	40	
Landing	1	5	10	15	
TOTAL					

Back Bencher

Over the years many of us have built models from free plans in the mags; and long may they continue. In recent years I have built the Mini Jazz and the Capiche; both a lot of fun to fly.



Having purchased two Jamara 480 ferrite motors for £10 at Sandown last year, when the Aerovan Twin was featured in the November 02 RCM&E, I couldn't resist the urge to build it. Full marks to Tony Nijhuis, the designer, it is very easy to build. Cheap and has a style of its own when the airliner trim is applied. Having selected the wood very carefully the airframe was very light but once the motors were fitted the weight doubled. The only modifications made were the wing servo mountings and the engine nacles which I shortened since the 480s are heavier than 400s. I'm glad I did since the CG came out slightly nose heavy. The finished model looks right and I was expecting it to fly like a Twin Star, but what a surprise.

The Aerovan went away sprightly from Tony's hands, gained height quickly and only needed a couple of clicks of up trim for straight and level flight but oh! The sound of two little Gunther props revving their hearts out, with their harmony on a low pass and climb out was music to the ears. The real bonus and surprise was that it's mildly aerobatic too. Push the nose down and gain speed for a nice loop and there's no screwing out. It rolls nicely from level flight with a little down in the inverted sector and inverted flight is possible with more down and quite a bit of care.

With the power off it will glide very well and even pick up lift if there's some about. Overall it's like an aerobatic slope soarer to fly and land. Lou' said I'd been flying for over ten minutes and in fact the second flight was timed at eleven and a half. For a twin that can't be bad. Recommend it? You bet I do. The only trouble is that every time I build a free plan there's the costly part of buying mini servos!

AEROVAN

Span 56", 2 X Jamara 480 7.2v motors, Jetti 350 esc, Hi Tech HS81 servos, Sanyo 8.4v 2000mAh battery = an all up weight of 2 lb 14 oz though a pound of that is the battery.

Staying on the electric theme I have recently tested my two new electric thermal soarers. Yes I built them



The original Aerovan freatured as a free ProPlan in RCM&E December 2002

over the winter, both loosely based on the Goldberg 'Sophisticated Lady.' The success of the first one, before it's demise, made me build the same model but with modifications to improve performance. Nothing ventured nothing gained, as they say! For the second model I changed the wing section to that of a Vernon Vortex which seems to have a slow sink rate in low lift conditions and has a wide speed range which penetrates well. I also put 3/8" washout in the wingtips as the first model was slow to pick the wing up when turning tight for that competition spot landing bonus. I also increased the rudder area for the same reason. I also still believe that 'T' tailed soarers seem to be more nimble in the turns than other tail ends.

Having built and finished both models at the same time I must admit it seems much quicker building two at once. I decided to fit one with a SpeedGear 8.4v 600 unit along with a larger (12 X 10) prop. I thought this would improve the climb rate since in competitions, where you only get a 30 - 45 second power run, height is everything. On the first flight, although the model showed promising performance and handled very well the climb rate was disappointing. Despite my experience of over half a century I suddenly found that I was on a learning curve in the art of electric flying -