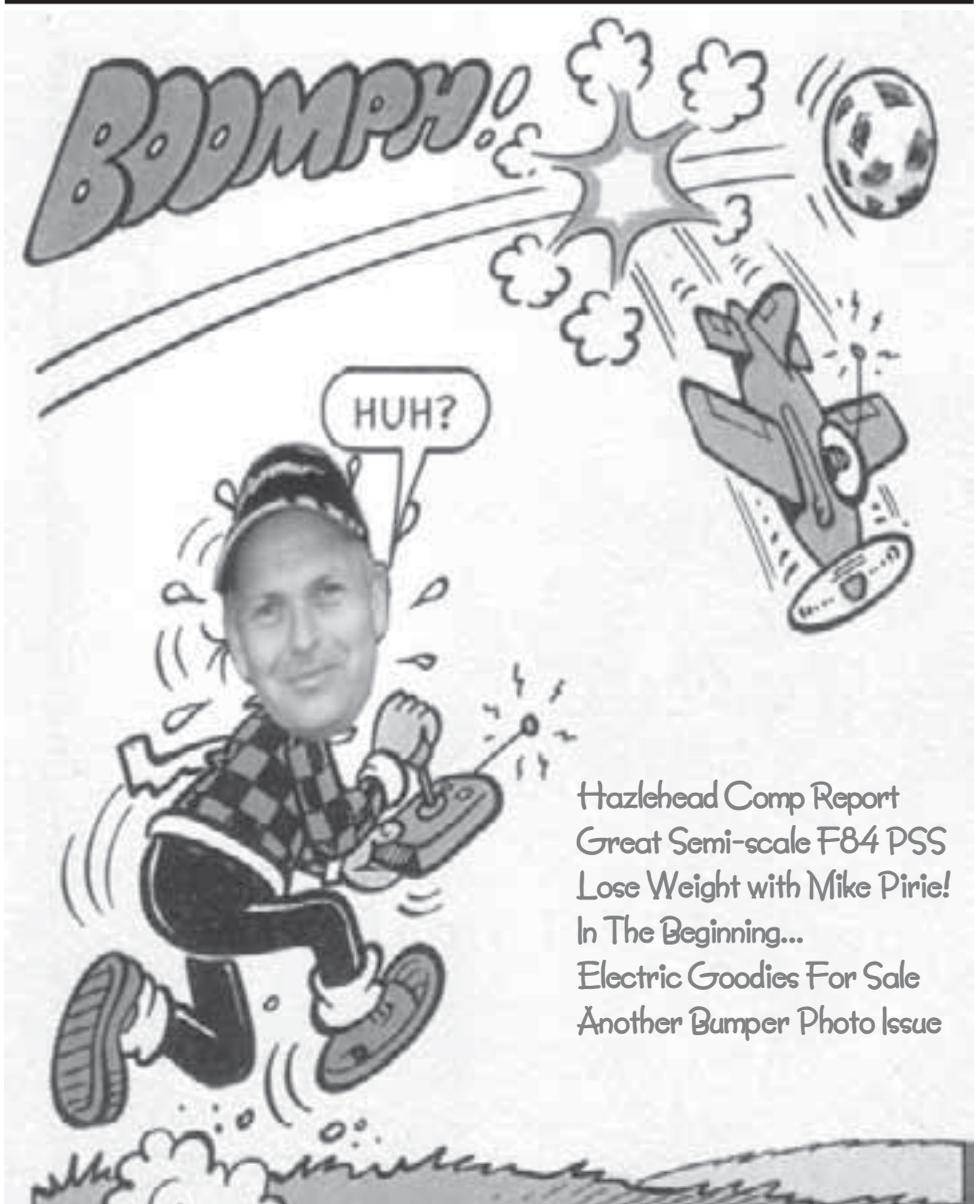




Short Finals



Hazlehead Comp Report
Great Semi-scale F84 PSS
Lose Weight with Mike Pirie!
In The Beginning...
Electric Goodies For Sale
Another Bumper Photo Issue

Football v. ADS at Hazlehead Park. The club's big annual event a no-go on the Saturday thanks to a council site-booking error and the lady footballers outnumbering ADS by about 50:1!

Aren't birthdays great! Probably most of you still get "toys" from friends and family on such occasions. In recent years, my presents have usually come in the form of vouchers for the local model shop. However, on this, the year of my umpteenth birthday, my two sons informed me that they were going to break with tradition and give me something more appropriate for a man of my age. Come the great day, I'm presented with the same size of envelope as last year ... surely this must be a book token, or perhaps even a record token (at last I can bring my Frank Ifield collection up to date). Tearing open the envelope, I discover half a dozen BUPA vouchersrotten buggers!

Well, dear reader, let's start off with two pieces of good news. First off, the previous three issues of the club newsletter tended to feature photos in which the same tired old faces would keep re-appearing. This has largely been rectified and you can now view a new selection of different tired old faces. Secondly, normal flying activities have once again been restored but only just! The long awaited re-opening of the club's most readily accessible slope site, Brimmond Hill, was announced in the local press on the 27th June. However, places nestling in the heart of farm land, such as Barmekin and Meikle Carewe would probably be inadvisable at the moment. Cairn 'O' Mount and Durriss have both been visited over the last few months.

The thermal "fun" competition, scheduled for Sunday 20th May, fell by the wayside

because Calder Park only became available to us on that very weekend. It is hoped that we can run this event later in the season should there be sufficient interest.

After a stuttering start, the Hazlehead weekend on 2nd and 3rd June did take place. Saturday's fun-fly turned out to be a bit of a cock-up, the local authorities having double booked "our" field, allowing four football pitches to be used for a ladies tournament. The



John McConville carefully assembling his new F3J "Eraser" for its maiden flight at Hazlehead, John Barnes ready to assist with the potential problem of tight carbon wing joiner rods!

weather did us no favours either! As it turned out, only three tentative flights took place in Saturday's 25 knot wind had there been a large club presence and conditions been perfect, safe flying would have been very questionable in view of the number of people using the

area. My contact at the "toon hoose", who accepted our booking way back in January 2000, knew nothing about these games taking place, the football organisers having made arrangements through the Beach Leisure Centre. Talk about the right hand not knowing what the left hand is doing!

One of the above flights mentioned was made by John McConville, who was keen to get his "Eraser" flight-tested before Sunday's competition. After a successful launch, and once clear of the turbulence at tree level, the

COVER PIC: *Taking a large dollop of artistic licence, a highly inaccurate representation of John McConville at Hazlehead during the "Eraser's" first flight late Saturday afternoon after the football had finished. Super model.*

plane performed very well in the strong wind, with only a twiddle or two on the trims being required. Brave man!

George Whelan, who was CD for the following day's competition, has written a brief account of the proceedings (plus photos). With a modest turnout we soon discovered that if you weren't flying you would be roped in for time-keeping or towing or winch work, and the additional help we received from other club members who "dropped in" during the course of the day was much appreciated. The committee would like to thank George for the time and effort he put into keeping things going and seeing it come to a conclusion late afternoon.

With the competition over, and the wind having disappeared, Tom Preston fished out his "Twin Jet" (the electric twin engined version of the Pico Jet) and put up a spirited display for those of us still at the park.

Complete change of tack here, gents. I hadn't given it much thought before, but I've now come to the conclusion that I don't like ARTF models very much. Why, you may ask? (did I hear a chorus of "who cares?"). Well, primarily because of very suspect "build" quality. Both the models I've seen actually fly very well, but neither stand up well to minor bumps ...ask Neil Davidson about his "Optima". A cautionary tale follows!

In recent times, I found myself assisting a young lad who'd bought himself an "Easy Pidgeon" ARTF electric glider. We'd had a couple of successful flying sessions in a field adjacent to his house in Findon ...I would take care of the landings, leaving him to get to grips with the flying. He was getting on well, the model being easy to fly and impressively stable.

Then, from out of nowhere (with me at the controls), up jumped this barbed wire fence, foiling a near perfect landing (I wish!). The model had just clipped a post and came down heavily. Inspecting the damage, I discovered that nothing was actually broken (apart from my pride) but that the glued joints on the tailplane had

separated. OK, it was my fault, and not wishing to get a solicitor's letter from the lad, took it away for repair. I rebuilt the tail, this time ensuring that there was sufficient glue to hold it together.

Next outing, this time at Calder Park, we did the usual range checks, then went for a test glide over the long grass next to the flying field. Mistake! The model hit a tuft, breaking the trailing edge of the main wing at the mounting holes. Bugger! There was no ply reinforcement in this area and the two wing mounting screws had split the balsa TE. At this moment in time, the "Easy Pidgeon" looked more of a "Poor Doo" to me! (you should have seen the look on my wife's face when I returned home again with the same plane)

Basically, my "beef" is this. If you haven't had to put the thing together in the first place, you probably won't know how to go about repairing it, and anyone entering the hobby via ARTF certainly won't have the raw materials to put right any damage, ie wood, glue, covering material or even a scalpel. In view of the market they're aimed at, these models should have been put together such that they are capable of handling a lot more abuse than this one did, without falling to pieces. However, perhaps all that the above indicates is that my flying is not as good as I think it is, or would like it to be. So chaps, watch for newcomers sporting one of those ARTF "thingsies", you may get more involved than you intended.

Incidentally, whilst driving to the above incident, I was listening to radio 2 and out blasts the old '60s hit "Bits 'n' Pieces" by the Dave Clark Five (I kid you not!). Talk about an omen, think I'll save the music for the homeward journey next time.

Now, there's an interesting thought! how about an ADS top 5, matching some of our members with appropriate pieces of music. Starting with the above, here's a few that come instantly to mind. No doubt you can think of some others? (let me know if you have any good ideas)

1. Bits 'n' Pieces - Dave Clark Five

A crash a minute Derek Robertson

2. *Please Release Me - Englebert Humperdink*
Aerotow enthusiast Alan Stewart
3. *Knockin' on Heaven's Door - Eric Clapton*
Thermal finder Brian Ord
4. *Bermuda Triangle - Barry Manilow*
Bill Stark for losing planes on Durris & Elrick
5. *I Get By With a Little Help From My Friends - Beatles* *Graham Irvine*

And finally, the committee are making progress on the "Davie Davidson Memorial Trophy" front, with (hopefully) a unique award being up for grabs by the end of the season. We just need a few members to compete for it!

A brief reminder then gents/lady. It's a thermal duration trophy that can be "flown" for on any outing at Calder Park. All you have to do is organise a time-keeper prior to launching via the winch, bungee or hand tow, with times recorded as soon as the model leaves the line, ending on touch down in the same field. These should be passed on to any member of the committee, should none be present at the time.

Our thanks once again to those of you who've taken the time to contribute the articles and photos for this issue of the newsletter. Keep them coming! OK, that's the starter over and done with (tripe for starters?), now onto the main course. **DR**

F84 Thunderjet

Bill Stark

The May 2001 newsletter contained some results from the club survey. This seemed to show a lack of interest in PSS and design and build. To fill the gap, here are details of a just completed scratch built PSS version of an early American jet.

The Thunderjet was one of the first operational jets from the USA. Underpowered, but with a good range, it was used as a fighter bomber in Korea along with Sabres as top cover. It also served with several NATO Air Forces. Rumour had it, it was so underpowered that even with rocket assistance, it only became airborne because the world is round!

I had always thought that it would make a good glider and found an article and plan in the June 95 QFI by Paul Jansen. This was for a small model of 35 inches span with a glass fibre fuselage, using the lost foam technique. I wanted something a little larger, a 48 inch span and of balsa and ply construction. The scale outline in QFI seemed good, so this was used as the basis for the new plan (available from Bill @ Wallpaper Plans.com).

An article in the American magazine, *Sailplane Modeler*, recommended glassed 1/32"



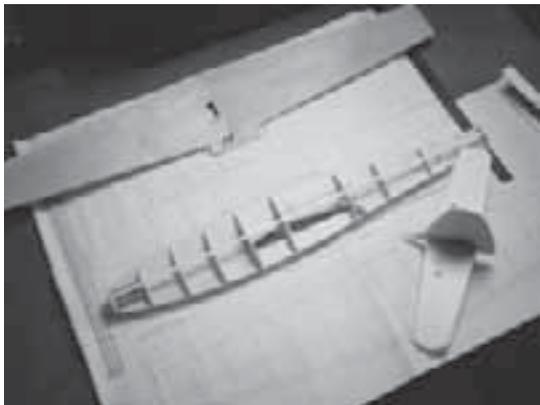
A pensive looking Bill poses with the Thunderjet in the back garden of his pre-war house, with all that remains of the original outside loo at his feet!

plywood wing skins for slope soarers, so this was used, minus the glass. The wing structure was built up with an Eppler 178 section, and the fuselage planked with 1/8" balsa. An excellent reference with colour photos was found in Aberdeen Central Library.

The wings, which were no problem to build but seem a little on the heavy side, should cope well with the Brimmond gorse. The fuselage took a long time it has been years since I had planked anything this big, but the end result looked fine.

How to strengthen and finish it? Two coats of sanding sealer were applied, then a leg from

an old pair of tights was pulled over the structure and doped. This gave it a lot of strength and left several options for the final finish. How you get the tights is up to you!



Wallpaper plan, built up and ply sheeted wing, balsa tail feathers and planked fuselage at an early stage of construction.

(Without wishing to cause Bill any embarrassment, I'll just mention that the "lady" on Pocra Quay from whom he obtained them only charged him for "serviced rendered", the tights being completely free of charge now back to the build. Ed.)



The completed model awaiting its maiden flight. (Bill has since flown this model off Cairn 'O' Mount. Delighted to announce that it really looks the part in the air, but on this occasion was limited to scratching around in the light lift should perform well on a steeper slope, the likes of Brimmond. Ed.)

In retrospect, it would have been better to fill the nylon weave and paint it, but I found that Solarfilm adhered nicely to the nylon, and so used that. The double curvature on the

fuselage made this difficult, but then again, it's not going to be entered in a scale contest. For the canopy, a 2 litre lemonade bottle was shrunk over a balsa former and this looks OK. The tip tanks were carved out of blue foam.

The end result looks good from a distance, and the all up weight is 40 ozs 20ozs per square foot. Will it fly? I'll let you know.

Bill Stark 28-05-01

The Hole Truth

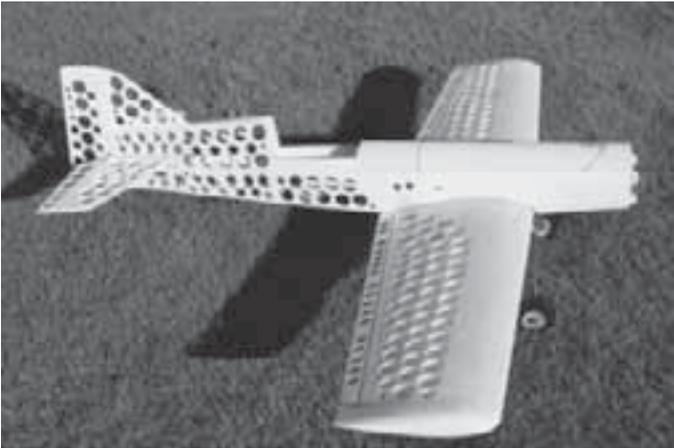
Mike Pirie

The typical electric model plane carries a high proportion of its total weight in the power-train. By the power-train, I mean everything that goes towards providing the necessary thrust for flight to take place, i.e. propeller, gearbox (if used), motor, speed controller and battery. The combined weight of these items usually amounts to around 50%, or half the weight of the model. By comparison, the figure for the equivalent i.c. model would be around 30-35%. The motive power in this case being the engine, the tank and a load of fuel.

The designer takes this into account when designing an electric model and compensates for the extra loading by making weight savings in other areas. The obvious place for savings is the airframe structure, but savings can also be made in the choice of radio equipment and the coverings and finishings. Fortunately with E-flight, there are none of the vibration and stresses associated with the infernal combustion engine and consequently airframe structures can be made considerably lighter.

Want to build an E-model? If you build from an electric plan or an electric kit, then the work has been done for you, but if you want to convert an i.c. plan or convert an i.c. kit for electrics, then some thought has to be given as to how you are going to save weight.

My own experience with the Galaxy Magician, a well known kit for 40-60 engines, was a real eye opener – the wood was the worst I've ever seen in a kit (the word boiler-plate springs to mind!). Let's hope they are keeping the good wood for their electric kits. Anyway,

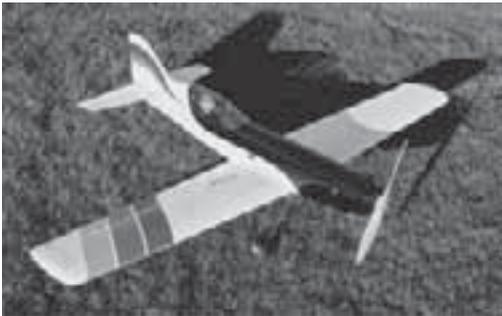


A Swiss cheese in the making! Almost seems a shame to spend all that money on a kit then throw half of it away. Probably not a good job to attempt unless one is in a very calm frame of mind!

mediocre at best. As it is, with a power input of 72 Watts/lb, it is really quite aerobatic as anyone who has seen it fly will confirm.

The power input for your model in Watts/lb can quite simply be calculated by assuming 1 volt for each cell in your model (e.g. if you're using an eight cell pack, assume 8 volts). Multiply this by the current draw of your motor (if you don't have an ammeter, get one!). The power input for the Magician is 12 (volts) x 30 (amps) = 360 watts. Divide by the a.u.w.,

which is 5 lbs, and we get 72 watts/lb. **MAP**



Nice covering job. Big advantage of electrics over i.c. power is that the model can remain looking this pristine for many years, assuming the landings are always perfect, the goldfish doesn't attack it,.....

I set about saving as much weight as I could, and as you can see from the picture, good use was made of the Brian Gaskin 'Soft Bore' tools.

The weight savings made are listed below:

Holes bored in fuz and tailplane	80g
Holes bored in foam wings	60g
Liteply bulkhead instead of ply	15g
Hard balsa wing-tips replaced by foam	25g
Lightweight wheels used	30g
Engine mount and tank discarded	70g

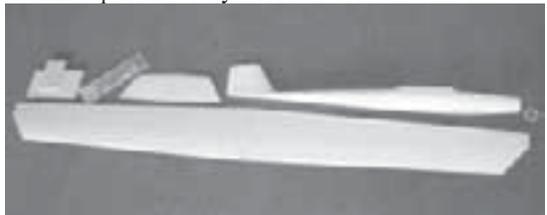
Total weight saving is 280g – that's almost 5 cells!

The Magician without the weight saving measures would have flown, but at only 65 Watts/lb, the performance would have been

Electric items for sale *Bruce Flockhart*

A couple of items which may be of interest to electric enthusiasts.

The first item is a French kit for an electric hotliner type of model, called a Ping-Pong. Moulded kevlar fuselage, foam/glass/carbon wing and tail. 60" span, fuz/wing/tail weigh c. 12oz as you see them. Popular in European 7 cell F5B comps at present. No plan, so for modellers with some experience. Very aerobatic! £90.



The second item is a 600w Hacker brushless motor, the B40-5L. This has an integral 4.4:1 gearbox and is suited to 6-10 cell operation. Weight is c. 200g and the case diameter is only 27.5mm, so it will fit into the slenderest of fuselages. £120.



I visited Scotland recently so these items have been left with ADS member John Barnes, should anyone be interested in seeing them. Model pic taken just before JB fell off the ladder! **BF**

Now a welcome to newest ADS member Mike Baillie, also new to r/c modelling! Mike bought equipment, then asked neighbour John Barnes for assistance (talk about the blind leading those who cannot see!). When Mike enquired about the costs of this assistance, the following article penned by Mike is it! Ed.

The First Time...

Mike Baillie

Always fancied trying at this.....so I nearly did!

Having spent many happy hours “improving” my ARTF kit to bring some realistic hope of survival to the first few flights, I was almost desperate to get my Cessna 40 into the air. Six months earlier, (young family!) JB had been press-ganged into the role of technical help-line for the assembly and as such had to be the man at the sticks for the first flight! I didn’t know any better so his “Mode One” (whatever that is) didn’t even confuse things.

The big day arrived and after loading all the essentials except for more clothing, we trogged off to the widest open space possible for the inaugural flight.

Setting up servos / control surfaces was trouble free, and after some double checking I successfully hand launched my pride and joy forward into the unknown. A dip earthwards as the airspeed built up, then she pulled away skyward, and more importantly all looking under control. No immediate barrel rolls and inverted ploughing of the field! In a word...relief.

It was great to see some airtime being

achieved with steady flying and much concentration by the pilot! Well he’s been away from engine power for a few years now! [1976 - JB] First impressions were...fast. Couldn’t quite believe the groundspeed, and suddenly I appreciated the need for space. Flying was taking full time inputs from John and after my wee dabble on the sticks we concluded this one wasn’t quite the “trainer” she looked like – more of an acrobatic high wing fun machine. Good for those with some idea of what they’re doing but no inbuilt stability for making my early flights any easier! Maybe a little ambitious on the selection stakes?

So, the result is I’m now quite addicted having seen what’s possible, frustrated at having been told what’s probable, and itching to get some of my own stick time to make those mistakes I think won’t happen to me ...but inevitably will! Can’t wait....



PS. Two successful take-off’s and landings, with no damage – So I’m still smiling a week later! **MB**

[A fully symmetrical wing section and no dihedral, what really kills this model as a ‘trainer’ is the weight. The box says 4.3lb. To get it to balance Mike had to add stacks of lead sheeting to the nose. Weight without u/c is 6.5lbs. Neutral stability (zero ‘parkability’) and 30mph landings. So that’s what the ‘F’ in ARTF stands for! JB]

Hazlehead Gala

George Whelan

ADS 100S & Open Competition, Hazlehead Park 3rd June 2001

in fact he nearly won a slot, and he said it's the best fun he's had with his clothes on for years.

It was an ambitious programme to run 100S and Open in one day, but as we couldn't get 12



The merry throng minus Jack Fisher, still making his way up from Glasgow!

For the first time in three years ADS was able to run its soaring competition at Hazlehead Park, the two previous years being cancelled due to bad weather. Again the club entry was pathetic but thankfully we had some visitors

from down south to make up the numbers and I would like to thank them for their support. So to Brian Sharp, Jack Fisher and Tom Preston, it was great to see you, lads. A special commendation also to Jim Ruxton in the Open comp for taking on the might of the all moulded superships with his Flinger HLG and bungee. He did not disgrace himself,

entries per event it didn't count as a BARCS league event, so we introduced winches in 100S to speed things up. We managed 7 entries in 100S and 8 entries in Open. A certain party (gulp) tried test flying a model with reversed

rudder, luckily only superficial damage and the model lived to fly another day, but it reduced the entry by one.

It was a game of two halves as they say, the 100S in the morning was generally bright and very windy while the Open in the afternoon was damp and flat calm.

The frequency matrix was quickly



The jammy worthy winners, Brian Sharp (left) taking the 100S trophy and John McConville the Open.



Jack makes it at last! Jack, Tom and Brian providing John McConville with helpful trimming tips for his model for next year, like "Leave it at home, please"!



The Pilot's Box was big enough for anyone to find it....

compiled and the first 100S round flown. To speed things up we agreed to use winches, which meant we only needed to run 2 slots per round. Typically the slots were won with a time of 2-3 minutes, with the only decent flight going to John McConville in the 3rd round with a time of 7m28s. Because of the blustery conditions it was a matter of self-preservation. ADS acquitted themselves well during the rounds with John Barnes, Gary Connel, John McC. and myself all winning a slot.

The fly-off was over 1 slot with Brian Sharp taking the laurels with a time of 5m3s. Gary Connel was 2nd and John Barnes 3rd. My own flight started very well thanks to some astute spotting from hawkeye Donaldson, unfortunately I bottled it in the windy condi-

tions when I was well over the garden centre and started to lose sight of the model against the black clouds. Fortunately I got back into the park but short of the landing area, hence the zero score.

After a brief pause while the landing tapes were laid out for the Open comp, battle was joined. Again each round was 2 x 4 man slots but by now the weather was very damp and the wind had disappeared. Slot times were won with times from 2m24s to 5m6s.

Only John McConville with his new moulded model (Eraser) could compete with the southern marauders and win a slot. John went on to the fly-off and won both rounds to win the Open comp.

A brief moment of excitement occurred in the Open 3rd round when John Barnes launched his Eliminator 134 while the model was switched off. The model did a beautiful chandelle on the end of the winch line before it met the ground vertically at a high rate of knots. Hopefully John's model will live to fly another day.

Lavishly engraved trophies were presented to the winner

of each competition and generally a good time was had by all. Special thanks finally to Andrea for taking some of the piccies here and timing for all and sundry when Gary was resting between launches! **GW**



....okay, almost anyone!



I don't care what Barnsie says, that's a cigarette burn on me wing!

Me, nervous? how many do you think I smoked during the first slot, Tom?

ADS 100S Competition - 3rd June 2001

Name	Rnd 1	Rnd 2	Rnd 3	Total	Fly-Off	
Brian Sharp	814	1000	1000	2814	1000	
Gary Connel	1000	970	260	2230	811	
John Barnes	1000	795	579	2374	425	
George Whelan	744	1000	252	1996	0	
Derek Robertson	655	819	245	1719		
Tom Preston	519	941	223	1683		
John McConville	620	0	1000	1620		

ADS Open Competition - 3rd June 2001

Name	Rnd 1	Rnd 2	Rnd 3	Total	Fly-off 1	Fly-off 2
John McConville	943	895	1000	2838	1000	1000
Brian Sharp	1000	1000	889	2889	748	871
Jack Fisher	636	801	1000	2437	720	731
Tom Preston	1000	1000	886	2886	0	0
John Barnes	997	760	0	1757		
Derek Robertson	509	554	622	1685		
George Whelan	352	770	316	1438		
Jim Ruxton	156	923	348	1427		



Endless electric enjoyment with simple rudder/elevator control models and direct drive Speed 600 motors



Start 'em young!

After a day of high winds, the evening session at Calder Park on Tuesday 29th of May was blessed with calm, sunny conditions. The eight and a half members present (Neil Masson's son Scott, being the half) spent a couple of hours of happy stick twiddling in the comparative warmth. Temperatures were such that some of the flyers enjoyed the luxury of unbuttoning their jackets!

Unfortunately, the club winch wasn't behaving itself, with the clutch failing to engage properly on occasions, which resulted in the line spooling out and getting into a right old tangle. It was just a tad less than a year ago that the bearings on the winch were replaced. This work was carried out locally, but it now looks as though we may have to send it away for repair this time. I have E-mailed Graupner direct, explaining the problem and asking for advice. Graupner says it will despatch the relevant replacement parts ASAP.

The club winch is still useable with care, but it may be prudent to bring along a bungee or hand-line until we can get the problem sorted out. **DR**

PROVISIONAL SCOTTISH EVENTS CALENDAR 2001

Month	Date	Event	Venue
	15	Open	Mossmorran
	22		
	29		
AUG	4-5	Open 100S HLG E-slot (barcs)	Mossmorran
	12	ADS BBQ & Fly-in	Calder Park
	19	100S	Mossmorran
	26	HLG ScotSlot	Mossmorran
SEP	2		
	9		
	16	ADS Slope Fly-in	Venue TBA
	16	100S	Mossmorran
	23	Open	Mossmorran
	30	HLG ScotSlot	Mossmorran
OCT	7	Standby Date	
*NOTE: Information on non-ADS events published by Dave Bradbury. SAA support for any Scottish event sites unknown at this time			

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The committee welcomes any material of modelling interest for publication, so a few words (& photos please) about one's latest aeronautical creation/experiences/hints'n'tips will be warmly welcomed. The Ed has fitted an extra large letter box in anticipation of being overwhelmed with information!