

# ADS



## ABERDEEN AND DISTRICT SOARERS

Newsletter No.41

*Whitlam Farmhouse  
Newmachar  
Aberdeen*

APRIL 1990

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### COMING EVENTS

First Tuesday evening at Seaton on 1st May (weather permitting)  
Last Tuesday of each month at Macki.

22nd April First % slot competition of the year at Glenraig. Note that beginners are encouraged to have a go, the emphasis will be on enjoyment of thermal soaring with like minded modelers - it's not just for the experts with competitive models. If your interested contact Dave Norris.

22nd April Fourdon Fly-in.

30th June-1st July North East Glide-In, Hazlehead

### COMMITTEE CONTACTS

Chairman/Safety Officer..... Jim Anderson - 641110  
Treasurer/Membership/Newsletter Editor..... Richard Holt - 06513 2777  
Secretary..... Andy Thoires - 712008  
Competition Secretary..... Dave Norris - 576279  
Social Secretary..... Jim Masson - 896794

## CHAIRMAN'S COMMENTS

Well, April has arrived. Getting on for 1/4 of the weekends of the year have come and gone, with the most impossible flying weather. Whilst some of us have managed to get some sort of soaring on some weekends on either Brimmond or Barneaken Hill, ironically, whilst the temperatures have been positively balmy, the wind seems to have become progressively stronger as the year goes on. I can remember standing on Barneaken a few weeks ago with Graham Donaldson and Richard Holt in a solid 39 mph wind, gusting to 43 mph. My (unballasted) Phase 4 just sat there, about fifty feet up and 50 yards out, going nowhere and doing nothing for about ten minutes until I got fed up flying it.

The only consolations are that it may have helped some of us to get a little more building in, and, as we approach spring the weather can only get better??

We are certainly hoping that we can get as close to a 100% turnout by all club members as possible for the Fly-in/Comp Weekend on the 30 June and 1 July. Please make a note of it, and certainly don't think that you *will not be good enough to fly at it* - its just going to be a regular club get together. The more people who can come the better fun it is going to be. See you there.

Jim Anderson

## ADS INDOOR COMPETITION, TUESDAY 20th MARCH

The third annual indoor comp was held at the Cammochmore Hotel. A slightly disappointing turnout of 16 fliers was more than compensated for in the level of enjoyment for all concerned.

Rules were slightly more complicated than before with bonuses of 1/2 a second being given for spot landings, aerobatics and scale models. John McConville managed to get two bonus scores for aerobatics in the form of 1/2 rolls, although if you ask me, he should have had points deducted for daring to bring the crappy paper darts he had with him.

Alan Stewart filmed the proceedings on his video camera - we all look forward to seeing the results, especially the mass launch at the end of the evening.

In the end, the winner was Richard Holt, second was last year's winner Jim Anderson. Richard won a £5 gift voucher from GTI Models. Dave Davidson was presented with the *Easter Burry Memorial Prize* for technical merit for his beautiful indoor rubber-powered model.

A raffle was also held, the first prize being a Bi-Fly kit generously donated by GTI Models, which went to Norrie Kerr. Second prize of a Graupner electric flight motor and propeller kit went to Tom MacPherson.

The evening was rounded off with a couple of videos. Thanks to all who came, where were the rest of you?!!

Dave Norris

## ELECTRO

I have been reading some blurb in my American Mags relating to S.R. Batteries Inc.'s rechargeable cells for electric flight. Whilst I am still awaiting the full line of literature which is being sent to me, here is a run-down on the cells which I have read about.

The Magnum Series cells which come in 1250 mAH and 1800 mAH packs 40% to 50% more capacity into a cell without increasing weight or size. Respectively the 1250 is 2" long x 0.7" diameter, weighing 1.15 ozs and the 1800 1.4" long x 0.9 dia, weighing 1.75 ozs. Magnum cells are primarily designed for applications in which the maximum current load is 12-15 amps or for intermittent applications.

The S.R. range of EP Max Pack Cells, on the other hand are designed for lowest possible impedance so that they can handle extremely high current loads. If you consider an application with a load in the region of 15-30 amps, chose the Max Pack rather than Magnum, cells. Unfortunately, to date I only know that they have 900 and 1000 Max Packs. The 900 Max Pack is the same weight and size as the 1250 Magnum.

To give an idea of the performance comparisons here is a table showing the results of bench running an 075 electric motor with an 8X4 prop.

Batteries	Amps	RPM	Minutes Run-Time *
SR900 Max	19	9200	3 min 15 sec
Sanyo 900 SCR	18	9200	3 min 10 sec
Sanyo 1200	20	9500	3 min 40 sec
SR1250 Magnum	18	9200	4 min 45 sec

Readings were taken after 15 seconds of run time

\*Total run time was read at point where there was no usable power left.

As you can see the SR1250 packs gives more running time than the normal Sanyo 1200's. In a 7 cell pack the weight difference between Sanyo and SR is 4ozs, which can easily be as much as 10% of the total weight of a small model.

In a different test, an SR 7 cell Magnum pack (very slightly larger than a standard 1200 pack) gave a normal capacity of 1700 mAH. The difference in flight time was 4.5 minutes vs 7 minutes for the Magnum on a Kyosho *Flash* sports aerobatic model.

The 1250 Magnum is as small as the Sanyo 800mAh and weighs the same, running for 50% longer at the same RPM and current draw on a given prop. The packs are tested before dispatch for cell matching vibration testing charge retention to name a few, which gives them the edge on reliability compared to the similar Sanyo high performance cells.

## ELECTRO COMPETITION

From an SR advert, I came across a comp for & cell electro which may be of interest to the club.

Each contestant makes a series of 4 minute flights, with a 2 minute period between flights to retrieve their plane. Contestants are not allowed to recharge or change their battery packs between flights. The Contestant, who logs the highest number of 4 minute flights, plus the number of seconds in their last flight, is the winner. The object is to minimise the effect of thermals on the outcome of the event.

Interested? lets try it! (By the way SR cells took 1st to umpteenth place in this comp, surprise surprise,) - No, I am not a salesman for SR! However, if we have equipment which is better and more reliable, I'm all for it, and feel that it is worth it to spend the extra money once for a long time of pleasure.

Costs that I received by phone mid-January are, for 7 cell packs

	Price	Postage	Total
SR900 Max	\$43.75	\$5.00 approx	£29.25
SR1200 Magnum	\$54.25	\$5.00 approx	£35.55
SR1800 Magnum	\$57.75	\$5.00 approx	£37.47
SR1000 Max	\$45.00	\$5.00 approx	£30.00

(Calculated at \$1.66 = £1.00, + Import Duty + VAT)

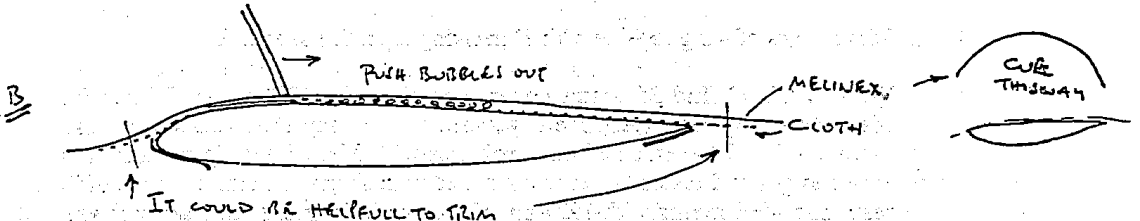
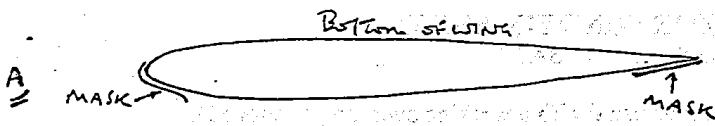
Payment by Barclay card etc. - phone directly to order - Perhaps we could get a few orders together to save money. If you are interested in further info, get in touch with me.

Jim Anderson

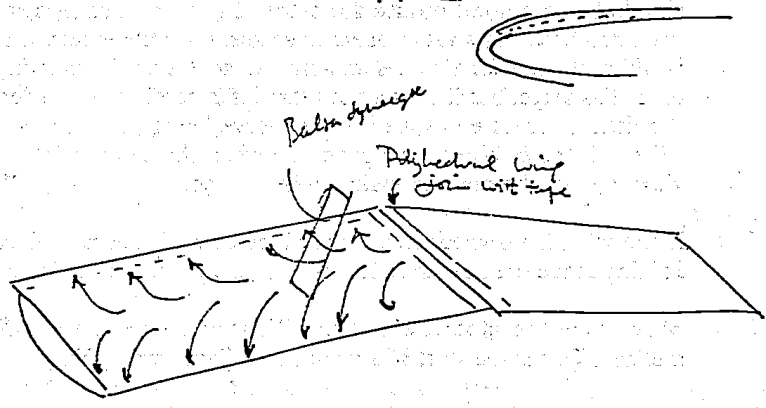
## USING MELINEX FOR WING FINISHING

(with thanks from Ralph Sparrow of BATS)

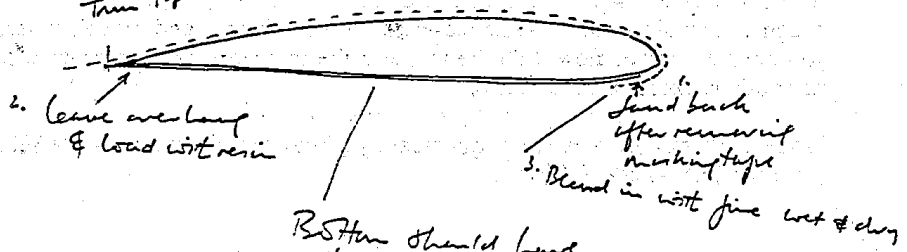
- 1 Prepare glass cloth as usual with a working overhang of about 1".
- 2 Cut melinex about 1" bigger than the glass cloth.
- 3 Mask edges of wing topside with 1" masking tape. See sketch A
- 4 Weigh resin (I find 25 grams covers one side of a 100" wing). Dilute with Methylated Spirits. (Apparently some people say that you should use methanol but I haven't had any problems with Methylated Spirits and it is easier to get and tastes better when mixed with sherry!). I dilute approx 60% resin and 40% meths with 1927 but if your resin is thicker to start with you may vary the dilution. You need a thin solution, not much thicker than water.
- 5 Lay the cloth on the dry wing underside and with a *Flattie* brush dab the resin through the cloth. Don't flood it but don't be too sparing. When one panel is done carefully lay the melinex on with the curl as shown. Then the melinex should be smoothed on using a piece of 1/16th balsa as a squeegee. Don't press too hard but start at one end centre, push the excess to the edges. This is where the masking comes in. Any that goes over the masking wants wiping off at this stage, but if all goes to plan this is hardly ever needed. You will see the little bubbles entrapped in the weave being pushed out - see sketch B. When all the bubbles have gone and when the cloth is fully wetted out the view through the melinex makes it easy to see.
- 6 If the wing is polyhedral use one-piece of cloth but two pieces of melinex. Joining at the break with sellotape after the process as in 5 above.
- 7 Make sure the cloth behind the TE is wetted out and adhering to the melinex. This is the start of a razor sharp (if you want) TE.
- 8 Allow to cure, then the magic moment - peel back the melinex at one end, fold back on itself and carefully peel off. If the melinex doesn't come away clean and shiny, the resin isn't cured. Allow to cure, and try again. When it is removed, trim excess with a sanding block, remove the masking tape and do the top. Now there is no reason why you should not do the top the same way with some care around the LE but I don't think you should bother. Leave it rough to turbulate the top surface, except on the high speed models where you need a laminar flow. I do the top with the thinned resin, two coats, with no sanding, except on the overlaps.
- 9 Hope it works for you. Any queries my phone number is 061-439 8021 (evenings) 061-429 8477 (work)



IT COULD BE HELPFUL TO TRIM  
 TO PREVENT WEIGHT OF MELINEX (OR SPRING)  
 AFFECTING LAMINATE AT LE & TE  
 IF IT PULLS AWAY TRY A PIECE OR TWO OF MASKING TAPE  
 TO HOLD IT TIGHT TO SURFACE AT LE.



Trim top & bottom TE leaving glass TE. — DIRT PROOF!



Bottom should have  
 the same shine as the melinex  
 no sanding needed.  
 If you get it right 1 coat is enough.  
 if problems then sand with wet & dry &  
 give another coat with melinex.

## THE MODEL ENGINEER EXHIBITION

While in London over the new year period staying with my brother for a few days, I decided to take the opportunity to have a look at the Model Engineer Exhibition. So off to Alexandra Palace I trotted armed with a long list of those hard to get modeling items that I thought would be in abundance with all the trade stands at the exhibition.

Upon arriving, I was disappointed to find only a few aero-modeling trade stands and that they had little to offer that could not be obtained at any local model shop. Well after discarding my shopping list (at least the wife would be pleased), I set off to explore what the exhibition had to offer.

Firstly it's a good opportunity to take out/renew subs for BARCS, the modeling comics etc. and take advantage of some special offers. Next lets look at the interesting models on display. Mick Reeves's 1/3 scale Sopwith Camel stole the show as far as scale goes, on seeing this model in the flesh its easy to see why it's been cleaning up in all scale comp's of late - a positive inspiration to even non scale modelers. The perfect attention to every detail would probably even make a full size example feel scruffy!

Nick Wright's world beating Electra E1 was on the BMFA's stand. In contrast to it's reputation this model appeared remarkably ordinary, not unlike many open models, (especially with it's slight polyhedral); does this mean F3B is not beyond the ability of the average constructor? However in due respect to Nick Wright, I'm sure that there is much more high-tech beneath the surface of the E1 than appears from it's deceptively simple exterior, not to mention Nick's obviously extraordinary flying ability.

Drifting away from RC, another model that caught the attention was the F1C (free flight power) model by S.Screen. The materials used being of particular interest, no sign of balsa or glass/epoxy, but being entirely fabricated out of very thin sheet high tensile aluminium and titanium. The model was a true work of art, both terms of the engineering effort and obvious aerodynamic efficiency. Maybe the RC fraternity has a lot to learn from the state of the art amongst the free flight boys.

Drifting even further from RC, a major part of the exhibition was dedicated to model steam railway engines and traction engines, many of them working and filling the hall with that attractive characteristic odor one associates with a bygone age.

Finally if anyone is thinking of outfitting a workshop with all the latest tools required to turn out scale gliders at the rate of Chris Williams, then the Engineering Exhibition is the place to go. There must have been 50 different types of band saws on offer and every other conceivable power tool for the rapid modelling of wood.

Richard Holt

## ADS SLOPE SITES

### ELRIC

Access is via A96 Inverurie Road or the A994 Alford Road. Turn off the A96 at Forrit Brae and proceed towards Brimmond Hill or turn off the A944 signed to Blackburn and drive round the western edge of Brimmond. Elric is situated north of Brimmond and has a distinctive clump of trees on the top. A small track leads to the foot of the hill, a sign directing you to the footpath to the top.

Wind direction 140-230  
Wind speed 10-20 Kts

There are plenty of picnic spots available. Lift is limited except when wave exists and things become very smooth. It is an ideal hill for quick trips.

### BRIMMOND

Access is as for Elric. There are three car parks for the hill, the most popular one is on the west side, beneath the pylon power cables opposite Westhill.

Wind direction 270 - 350  
Wind speed 5 - 25 Kts

This is the most popular hill because of its easy access and consistent lift, provided the wind is in the NW. Brimmond has been flown in other directions but lift is limited and gorse abounds and is not recommended.

### DURRIS

Access to the hill is from the A959 Banchory/Stonehaven road via the road to the TV mast. This road is just at the sign *Fountain Forestry*. Proceed up this road and park at the roadside just 200 yards short of the mast. Immediately to the right is a track leading to the northerly mast anchor block. Turn right again just beyond the block climbing the hill at a firebreak between the young trees and left at the top until the top of the slope is reached.

Wind direction 280 - 340  
Wind speed 5 - 30+ Kts

Please note that ADS is responsible for ALL model gliding here. Care is required because of the young planting. This slope is often used by hang gliders. The lift is excellent.

### CAIRN O'MOUNT

Access is by the B794 Banchory Fettercairn road and is located at the highest point the road reaches. Park at the lower car park below the *cairn* - the slope is immediately in front.

Wind direction 130 - 180



Wind speed 5 - 30 Kts

### **BARMEAKEN**

Access is off the B9119 Westhill to Echt road. Turn right at the Echt cross-roads and follow B977 north for approximately 1/2 mile. Turn left into farm track (at fresh vegetables for sale sign). Follow track around south side of hill for approximately 1 mile. Parking is available in a small disused quarry on the left just beyond the end of the woodland on the right. Climb straight up hill and fly off the heather about 3/4 of the way up, allowing a landing area upwind of the stone ruins on the top.

Wind direction 180 - 270  
Wind speed 10 - 30 Kts

Barmeaken, being conical in shape, would probably work in all directions, however SW is the most popular being the only one known to have been tried. There are more accessible hills that probably work better in most other directions.

### **HILL O'FARE**

Access is off the A980 Banchory Torphins road. About 1 mile from the Raemour Hotel is a sign to the right to Corfeidly Farm. Parking is available at the farm, but please check with the farmer. Walk from here towards Hill of Corfeidly up a distinct track, past a small cottage to the disused quarry. Turn left at the quarry and then climb straight up the hill first through bracken and then heather to the top. A superb site, but a difficult climb.

Wind direction 150 - 240  
Wind speed 5 - 30 Kts

Hill O'Fare Bowl can also be reached from this point by following a track across the top of the hill to the west.

Wind direction 220 - 260  
Wind speed 5 - 30 Kts

### **STRATHFINELLA**

Access is from the southern foot of the Cairn O'Mount. Take the road that runs through Glensough to Auchenblae. Park opposite the entrance to the Brechin Fishing Area. Walk down the road and across a small ford at the western edge of the Loch. Climb the hill immediately in front.

Wind direction 270 - 340  
Wind speed 5 - 25 Kts

### **FINDON**

Access is off the A92 Stonehaven road at the turn, just before reaching Portlethen. Follow the signs to Findon village and on reaching a row of houses running SE to NW at the southern edge of the village, turn right until you reach the Unilever

Research Laboratory. Turn left here and drive along until reaching Old Mill Road. Follow this road down a rough track and turn left between the new bungalows. Park next to the *Cliffs are Dangerous* sign. Now walk about 200 yds to the edge of the cliff.

Wind direction 080 - 130  
Wind speed 5 - 25 Kts

There is an extremely deep gully at the northern edge of the cliff, no beach at the bottom. However the flying area is fairly shallow allowing a moderate area for landing in front. Not for beginners.

## STONEHAVEN

The site is reached from the old south road out of Stonehaven, taking the cliff top footpath from the top of the hill adjacent to the War Memorial. The cliff is on the top of the hill adjacent to the War Memorial. The cliff is on the southern edge of the monument with a large field behind for landing.

Wind direction 090 - 150  
Wind speed 5 - 35 Kts

Parking is limited. If in doubt park at the harbour and walk up the cliff. There is a limited beach at the bottom and the bole is not very high, so a landing can be achieved at the bottom with care.

## ST CYRUS

Turn left at the craft shop at the northern end of the village of St. Cyrus. Cross the railway line (disused) and take the road between the church and primary school to the cliff edge. The cliff is about 300/400 feet high, virtually with sheer with a small winding track down to the 4 mile long beach.

Wind direction 090 - 170  
Wind speed 5 - 35 Kts

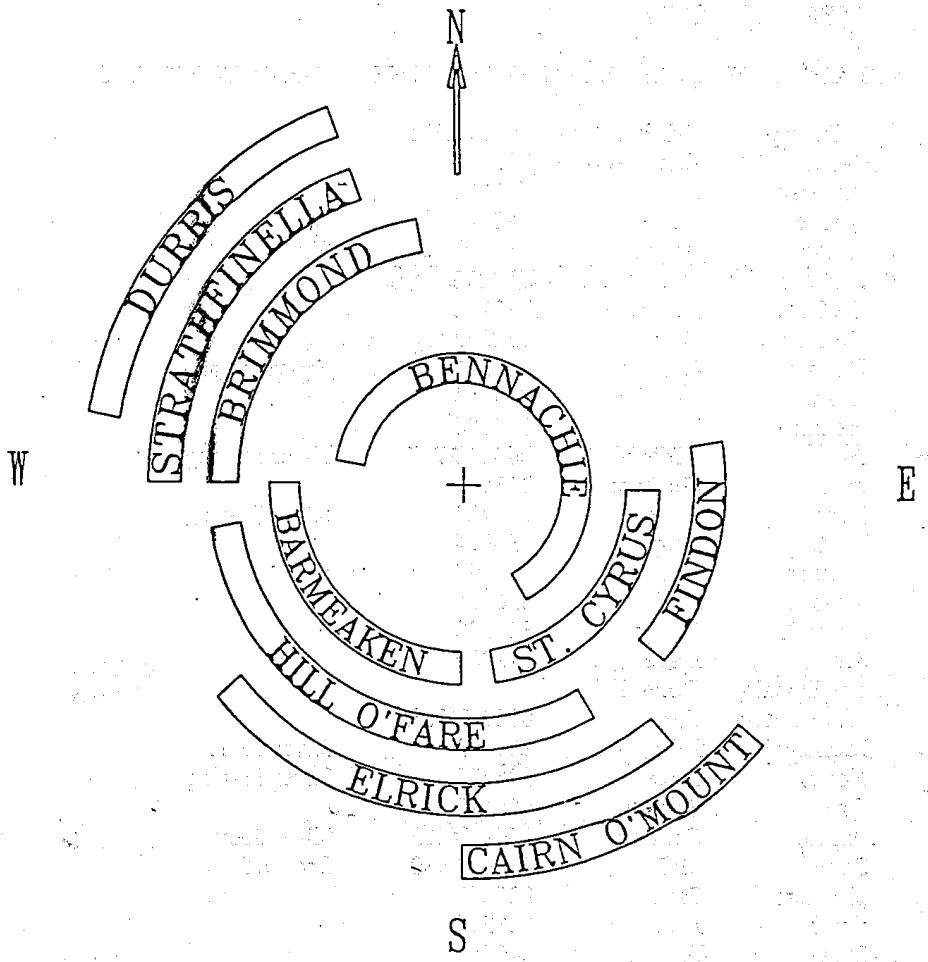
Care is required because of the *curl over* at the edge when landing. The area is a nature reserve and is often used by hang gliders. Car parking is limited at the edge, so if in doubt park by the church. A superb *family* site, with shops, pubs, beach etc. Flying is superb.

## BENNACHIE

Access is via the Chapel of Garioch road off the A96 north of Inverurie and then to the sign-posted car park. Take the footpath leading to the Mither Tap turning off towards Craig Shannoch. At this point is an easterly bowl looking out over Inverurie. Ten minutes walk takes you across to the north west bowl overlooking Insh.

Wind direction 280 - 150  
Wind speed 5 - 35 Kts

Wind direction 050 - 150  
Wind speed 10 - 20 Kts



SLOPE SITES AND BEST WIND DIRECTIONS

# MEMBERS LIST

LAST NAME	FIRST NAME	TELEPHONE	FAA CERTIFICATES
Adamson	William	06517 2221	
Allan	Douglas	790500	
Anderson	Jim	641110	
Aoone	Simon	780448	
Arown	Angus	0569 64144	Silver Sport
Davidson	David	692922	
De Salvo	Danny	732242	
De Salvo	Dave	732242	
Donaldson	Graham	486961	Bronze Sport
Grant	Ronald	714454	
Hamilton	Tom	310306	
Holt	Richard	06517 2777	Silver Soaring
Irvine	Graham	1635	
Kerr	Norrie	324722	Silver Soaring
Madison	Gary	734924	
Masson	Jim	896794	
Masson	Neil	896794	
Mitchell	Gerry	324828	
Morris	Dave	742776	
MacDonald	Donald		
MacPherson	Tom	0569 63868	
McConville	John	824179	Silver Sport
Norris	Dave	576279	Silver Soaring
Ord	Brian	698449	
Philip	Graham	0569 64209	Silver Sport
Satterley	Mal	0569 62980	Bronze Sport
Simmers	Paul	825868	
Smith	Allan	321536	
Stark	Bill	640560	
Stewart	Alan	722663	
Stewart	Colin	722663	
Taylor	Gordon	319075	
Thoirs	Andy	712008	Silver Soaring

Total paid up members 33