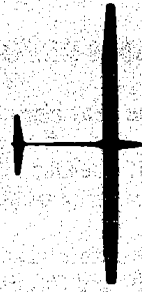


# ADS



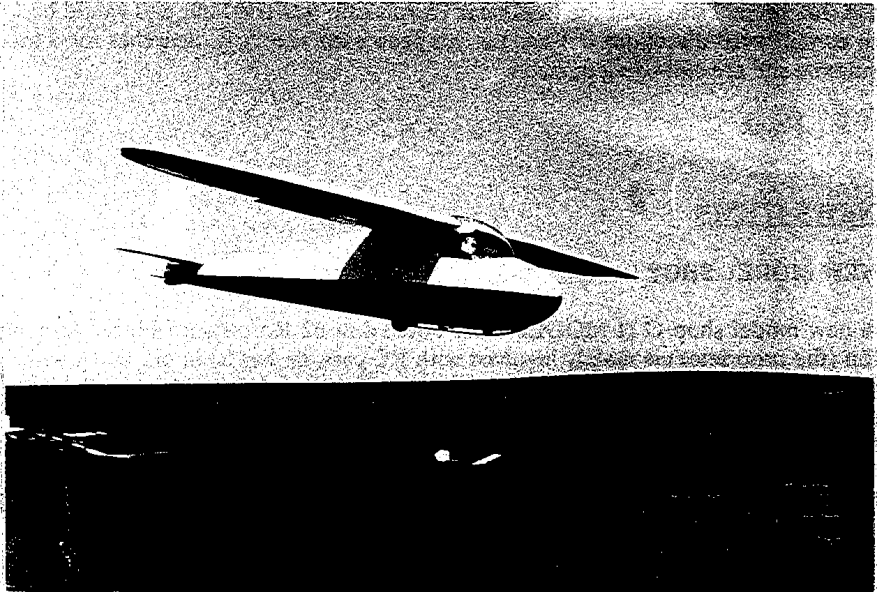
## ABERDEEN AND DISTRICT SOARERS

Newsletter No.38

*Whitlam Farmhouse  
Newmachar  
Aberdeen*

JULY 1989

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Jim Masson's LO 100 at Cairn O'Mount at the ADS 10th anniversary fly-in last year

### COMING EVENTS

Sunday 16 July - Slope fly-in.

Contact Dave Norris on 576279 for confirmation of venue on the day.

Tuesday 25 July - Mackie Academy

Contact Graham Philip

Saturday and Sunday 5th/6th August -

Scottish Soaring Nationals - Pitreavie.

Saturday and Sunday 26th/27th August -

Montrose Aerodrome Museum Society Airfield Extravaganza

## CHAIRMAN'S REPORT

Middle of the year already and I don't seem to have got enough flying in, this year seems to have got off to a slowish start with club events not seeing the numbers we had last year. Tuesday nights have also not been all that great, lets hope things get better for the rest of summer (or have we missed it!).

It is worthy to note that we have attended two static displays in the Music Hall "Sport for All" and "Model World" where a good show was put on both cases. Many thanks to all concerned.

On the flying field front the Stonehaven lads have got permission to use the old tip on the Netherley road for power flying, but Sundays only and a maximum of six fliers only. Note we are on probation here so take care, and it would probably be better to give M Satterly, G Philips or C Ganley a phone before going for the 1st time. Negotiations(!) for the waterplane site are still ongoing.

On the thermal site front the field near Flora's cafe was tried out and would be OK in certain wind directions but has not yet been used regularly. Searches for a more suitable site are still being pursued.

Frank

## NEWS ITEMS

### NEW MODEL SHOP

A new model shop GTI MODELS has opened at 62 Rosemount Place. Although Ian (the proprietor) is mainly involved with RC cars, he has been out flying with us, and managed my Phase 6 with ease. The shop is well stocked with aircraft kits and goodies and as Ian is "into" cars has a good selection of items which could be used for electric flight.

Ian is very receptive to suggestions for ideas on what to stock and is giving 10% discount to club members on most items.

The shop is open all day six days a week until 6pm. Next time you are passing it is well worth a visit or give them a call on 646554 if you're after something specific.

### **MONTROSE AERODROME MUSEUM SOCIETY AIRFIELD EXTRAVAGANZA SAT 26th AUG AND SUN 27th AUG 1989**

This should be of interest to all ADS members as there are to be a selection of full size aircraft, full size gliders, model scale gliders and large and small model power aircraft. Other activities over the weekend are as follows:

- a) Parachute display team
- b) Montrose sub-aqua club display parasailing along the airstrip.
- c) Phantom from Leuchars (hopefully full display this time).
- d) RAF amateur radio society world-wide communications link.
- e) Montrose motor cycle club, displaying vintage military vehicles.
- f) ATC.
- g) Army.

- h) Brechin railway preservation society stall.
- i) Tayside fire brigade.
- j) Tayside police.
- k) Red cross in 1939 uniforms.
- l) Coastguard.
- m) RNLI. etc.

Camping and caravans will be catered for on the airfield from Friday night.

There will be a Celidh planned for the Saturday night and an all night bar provided by the Army on the airfield - drinks at club prices.

Weather permitting, this should be a very worthwhile weekend, so lets see all the three power winches in operation, hand towing, and some aerotowing as the ADS contribution.

Contact Graham Philip if you need any more information.

### **MOTORS FOR GLIDERS**

Congratulations to Dave Norris, being the second ADS member to win an OS FS motor as a result of the R/C Model World plans service draw. This time being a OS20 FS, Graham Donaldson won a OS90 FS a few months ago. Does this mean we'll be seeing more tugs in the club?

### **EVENTS REPORTS**

#### **FORDOUN 23th APRIL**

This first Fordoun of 1989 was the poorest attendance of ADS members that I have seen since the event began some four years ago, probably because the weather was just not behaving.

Nevertheless the Montrose Club arrived in sizeable numbers as did the modelling fraternity amongst the Americans based at the USAF station at Edzell. Aberdeen Aeromodel Club was also present.

#### **MONTROSE FLY-IN 17-18th JUNE**      Graham Philip

A weekend that should be entered into the record books with winds light and temperatures into the eighties.

Flying started very early in the morning with a good turnout of people from all over Scotland. There was aerotowing, gliding, and power flying all day. An excellent barbecue was provided and drinks did not last long due to the heat.

For those who arrived later in the day, sadly they missed a unique opportunity to see the arrival of two rare full size aircraft - a world war one SE5 biplane and a recently imported from the states Luscombe. The SE5 later put on a first class aerobatic display with some very low passes.

Congratulations to the Montrose lads for professional organisation which is making this event one of the most popular in the model aircraft calendar.

## ADS OPEN AND ELECTRIC COMPETITION, HUNTLY, 2nd JULY

Unfortunately only 6 fliers appeared for what turned out to be an excellent day's flying with some of the best thermals seen at this site.

Due to the shortage of numbers we held an informal thermal comp., flying two up at a time. After some very enjoyable flying, Richard Holt won the unlimited fly-off from Andy Thoires.

We also held an impromptu electric competition which basically consisted of the five models launching together, last one down being the winner. After 27 minutes John McConville landed followed seconds later by Andy Thoires, the winner.

Thanks to all who turned up. It would be nice to see a few more faces at club events - the more the merrier you know - they are supposed to be Club events. Any suggestions as to how we could encourage more people to attend would be gratefully received.

Dave Norris.

## RADIOGLIDE 89 27-29th MAY

A contingent of ADS members made their way to Pitreavie playing fields, Dunfermline for this years BARCS Radioglide - a national gathering of glider guiders - and three days of competition.

We were lucky enough to have glorious weather on the Saturday for the 100S Class. Pitreavie is an excellent soaring site and thermals were coming through regularly. In fact, as most people were able to fly-out the 8 minute slots, it became a competition as to who could launch the quickest and land on the last of the countdown pips.

Personally I had a very good day, winning two out of the five slots and scoring over 900 in two of the others. Thanks to Norrie for his time-keeping/talking.

Norrie had disastrous luck suffering a mid-air collision which destroyed his plane. Up to that point he been on-line for a place in the fly-off. However made a good showing with his chuckie in the last slot - apparently it tows quite well!

Andy also had a good day winning a slot and would have done batter except for a certain timekeeping incident (whatever you do, don't ask Andy about it - he gets very annoyed!).

At the end of the day the results for the 100S were as follows:

Dave Norris	28th	3854 points
Andy Thoires	45th	3524 points
Norrie Kerr	46th	3520 points
John Barnes	48th	3504 points
Brian Ord	75th	1745 points

The total entry was around 84.

Open and Scale were held on the Sunday. It was much less sunny, if not overcast and

fairly windy.

The wind contributed to a fair amount of carnage with the large slow aircraft being tossed about in the turbulence from the trees around the field.

All of our scores were down from the Saturday. John McConville had come down for the day and flew to his usual standard, guaranteeing himself a place in the fly-off without having to fly in the last round on the Monday.

Monday was still overcast but the wind was down and thermals increased to the extent that I was able to double my previous days score with my last flight.

At the end of the four rounds the results for the open were as follows:

John McConville	3rd	2990 points
Dave Norris	57th	2144 points
Norrie Kerr	65th	1883 points
Andy Thoires	70th	1577 points
John Barnes	79th	845 points
Brian Ord	81st	699 points

There were approximately 90 entries in total

John McConville went on to the fly-off but was unfortunately severely affected by hay-fever which was reflected in his final placing at 8th.

Also run on the Sunday was the Scale event which had an entry of 8 aircraft. Andy Thoires flying his Slingsby Vega came in 5th. It must be said that there were clear errors in the scoring as it was applied and that had the rules been applied correctly, Andy would have been placed significantly higher.

However all in all it was a very enjoyable and satisfying three days and a great inspiration for some practice and do better next time.

Dave Norris

## KIT REVIEWS

### **THE PAT TEAKLE HP18** Frank Skilbeck

At long last I have completed my Pat Teakle  $\frac{1}{2}$  scale Brayant HP18. For those of you who haven't heard of

Mr Teakle's range of  $\frac{1}{2}$  scale sailplanes, this particular one is a 150 inch model of the American Brayant HP18 which is slightly unusual as it is a V tail glider.

First thing that strikes you about the kit is the size, the box is about 8ft long and was delivered to Aberdeen Red Star and had to be collected from the station.

What you get for your money is not a full kit but the basics consisting of:

Fibreglass fuselage  
Foam wings with spars and control cables fitted

Foam tailplane  
Canopy  
Plywood canopy floor  
Main wing spruce leading edges

All the above components being of the highest quality. The rest i.e. wing joiners, wing trailing edges, tail leading and trailing edges plus other wood etc. you have to supply yourselves. Bearing in mind the cost of the kit this is very acceptable.

No full size plan is supplied just a single A3 size drawing (shown) giving vague construction notes, the idea being that if you're experienced enough to fly one of these then building should be no problem. This was the case although the sheer size of the thing (70in plus wing panels) makes construction fairly slow. The only problem I encountered was deciding how to put the wing joiners in the fuselage, deciding in the end to cut a hatch in the top, which would not only assist construction but would give access to the flap and aileron servos. (Note the glider is fitted with flaps and not airbrakes). I did consider fitting the aileron servos in the wing, but this would have meant having extension leads 48ins long and this together with the thin wing section and already fitted control cables put me off the idea.

Construction followed the suggestions on the plan! except that the ruddervator linkages were installed internally in the fuselage. The wings were glass clothed (cloth supplied by Norrie) with SP113 resin and spray painted (thanks to Dave Morris for the loan of the spray gun). The fuselage was also spray painted.

A total of five servos were fitted two for the ruddervators (mixed via the transmitter Fleet PCM) one on the flaps controlled by the "throttle" stick and one servo for each aileron. The aileron servos not connected via a Y lead but direct to the receiver and mixed as flapperons on the Tx. This allowed some differential to be set up and activation of the flaps put both ailerons up. The idea being if the flaps (from the throttle) proved ineffective the ailerons could be put up to reduce lift.

All up finished weight including about 6oz of ballast was 10.5lb just below the 11lb limit before CAA exemption is required.

First flight took place on a poor day on Barmekin, having climbed up I wasn't going without a flight. Dave Norris launched it and away it went gaining height all the way. Controls seemed fairly smooth although aileron response was pretty slow, rudder (V tail remember) was quite effective although caused a nose down trim when used. One problem was apparent - Barmekin is not the place to land scale gliders and in the end a downwind uphill landing (arrival) was made.

Second flight took place on Brimmond in much more favorable conditions and showed what a superb flier this plane is, a small rearward adjustment to the c of g after the first flight eliminated the rudder nose down effect. Deploying the flaps about two hundred feet above the top of the slope into a 20 knot wind allowed an almost vertical descent under full control. Unfortunately the next flight showed another problem, these are difficult to launch as there are no good hand holds and it failed to get away doing slight damage to the wing joiner.

A subsequent flight on Durris showed some superb thermalling ability there being no slope lift but fantastic thermals coming through (and lots of sink). However this flight terminated when practicing landing approaches the sink arrived and another downwind landing had to be made. Unfortunately this happened to be on the only

rock hidden in the heather around, result damaged fuselage. However repairs are underway and should be back in the air soon.

Conclusions are pretty simple if you are looking for a cheap (to buy that is)  $\frac{1}{4}$  scale glider with good flying characteristics then this or one of Mr Teakles other gliders fits the bill. However be warned they need lots of space to land in and are not to easy to transport. But they do look good in the air.

#### **THE EMP ALGEBRA 4M Dave Norris**

The EMP Algebra 4m is another development of the well known Algebra 2.5 metre soarer, flown in ADS by John McConville.

At 4 meters the Algebra is potentially quite a handful so I opted to go for ailerons. Instructions for the aileron conversion were supplied with the kit (on request).

Despite being a foam/fiberglass kit this is no quick-build project - for instance imagine planning and sanding a total of 8 metres of leading and trailing edges. Everything went together without problems - the quality of the kit is very high (should be, it's not cheap).

Wing's were finished in epoxy and  $\frac{1}{2}$  oz glass cloth followed by several tins of car spray. I've only painted the tops of the wings - I'm still saving up for the paint for the undersurfaces!

The first flight was a dream - straight up the line, a touch on the trims and we were away for some 15 minutes. She flew like a thoroughbred being very easy to fly and very smooth and controllable. The Selig section undoubtedly contributes to this with its impressive speed range.

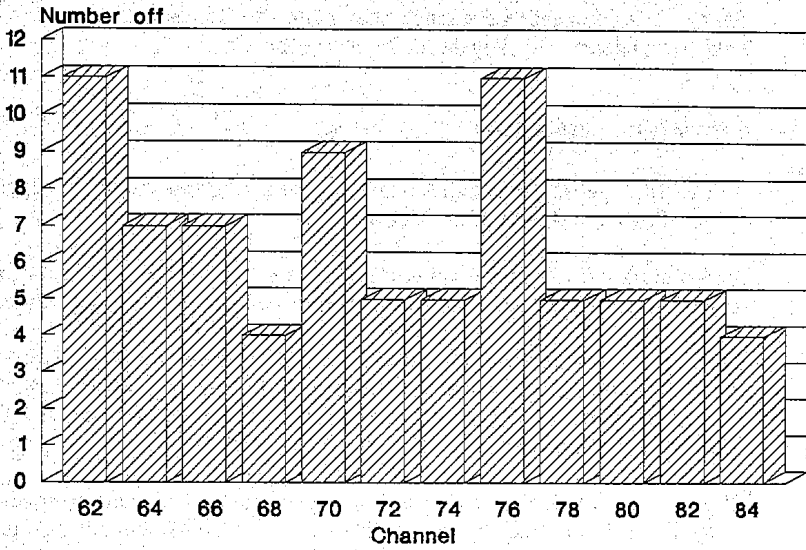
I would definitely urge anyone building a 4m Algebra or any other soarer of this size to fit ailerons. The handling is so much more precise that you have infinitely more control, especially useful close to the ground of in windy weather. I was convinced of this on the Sunday of Radioglide when large rudder only soarers were being damaged in numbers. They are too slow to react when a wing dips due to turbulence. The aileron jobs handled the conditions much more successfully.

I'm still getting to know the aircraft and learning to fly it but impressions are of a very easy to fly aircraft with an excellent climb rate and speed range. Also an excellent quality, if fairly expensive kit.

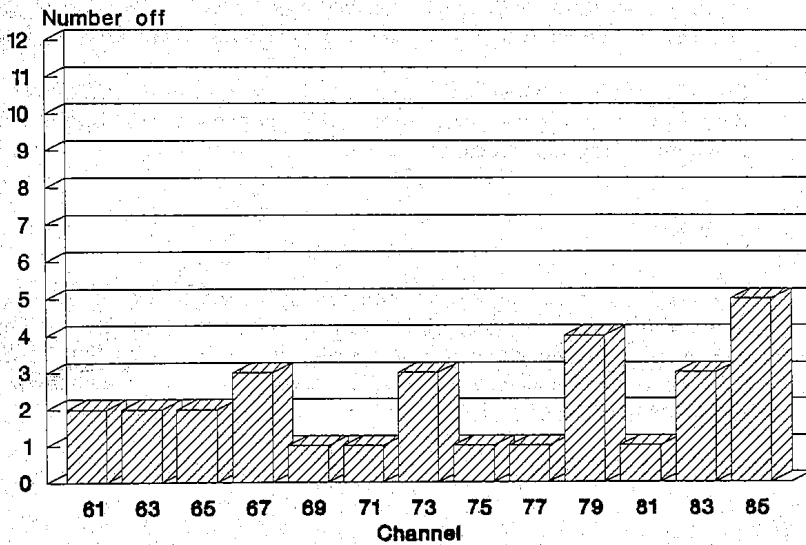
#### **SAFETY**

After laboriously typing all the membership data into a computer database (from those who filled in the forms), at the press of a few keys, the two charts over the page were produced, showing how many members use each of the 35MHz channels. So if someone else always seems to be on your channel, or your thinking of buying new crystals, avoid 62 and 76!

## GLIDING FREQUENCIES



## POWER FREQUENCIES





While on the point of frequency control, it was disheartening to observe another crash on a recent Tuesday night club get together, as a result of a frequency clash. I noted that less than half of the members flying had their personnel frequency peg-boards (per December newsletter). The peg-board system requires all members cooperation to operate successfully and to guarantee safety. Not having got around to making any myself, I cut out some ply as soon as I got home, deciding the newsletter could wait another couple of days!

Richard Holt

## THE DUTCH CONNECTION

**The following letter is from Teun Van Waart to all club members. Teun was very much involved with ADS at the beginning, becoming Chairman for quite a few years:**

Dear ADS friends,

It has been quite silent from the Dutch lowlands, but finally a few words. First the best wishes to all we know from Tineke, Erik and Astrid. It's approaching six years since we left, many things have changed, like Erik and Astrid are taller than I am, and I'm getting a bit gray (two not totally unrelated events) and ADS has many new members and continues to grow!

The newsletter - thanks for continuing to send it to me, and thanks to the Dutch postman who isn't fooled by the mutilated way Brits (or their computers) spell my address, has a very professional layout. But it's gratifying to see the basic design is unchanged. John McConville's logo is still outstanding.

Going through the nice December issue, I notice we have been away quite a while indeed! I seem to remember some members of the new committee more or less joined the club when we left, mid '83. The 'flying power' issue obviously is still alive. I very much like the revision of the Constitution, giving priority to the gliding but covering the power as well. By the way, I presume the newly acquired aerosol horns are of an environmentally friendly type!

I spotted Neil Masson in the Scottish Open League, well done.

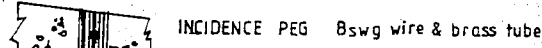
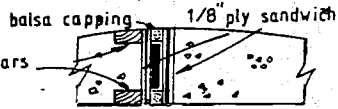
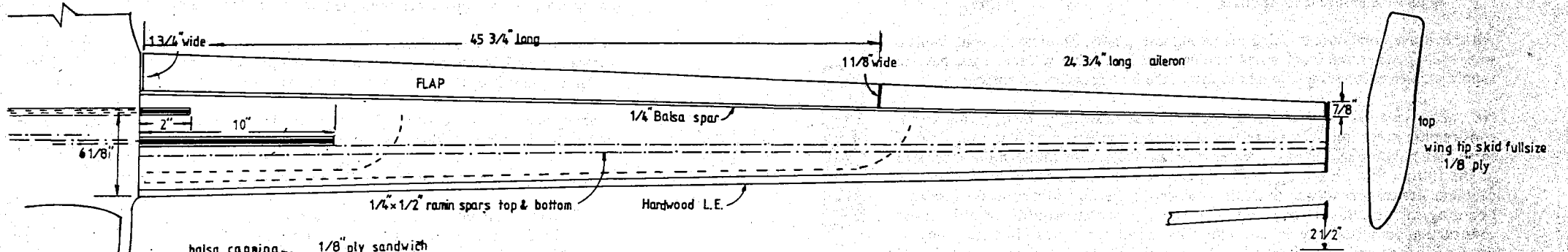
If everything went according to plan you had a slope/pylon race some two weeks ago. I hope you had better weather than we did - here it was pretty hopeless, wet but enough wind!

Recently the 4.50m span Mistral flew for the first time since we left Aberdeen - from the flat field. Using a power winch it was a pretty smooth event - although without much thermals around the Mistral comes down pretty quickly. With power winches popping up in ADS, I presume F3B models and the biggies are coming in as well.

With many hill soaring miles under the wings, I'm a sort of local expert on dune soaring. That has some unique features. To mention two; normally you leave your flightbox on the beach and stand a bit up the dunes (you have to fly from a through-path, the dunes themselves are a no-go area). It's important to close the flightbox. Last summer a very mature Alsatian or so decided it had to leave his mark in my box and lifted a leg. Just rinsing wasn't enough with all the padding foam rubber in there!

WARNING Do not allow cellulose or polyester based materials (dopes fibreglass resin ect) to come into contact with foam cores- seal all joints thoroughly with white glue. NOT TO SCALE.

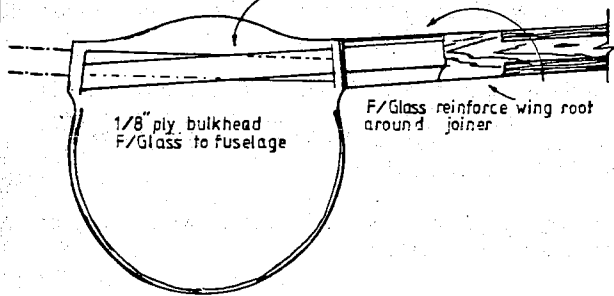
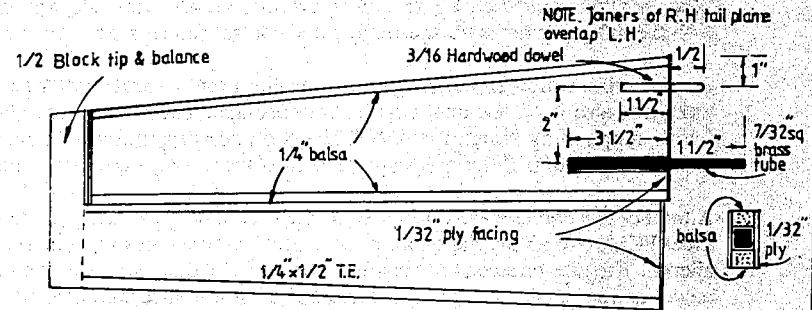
It is assumed that those building this model are experienced therefore some obvious detail has been omitted, and other assembly methods may be preferred



WING JOINER 15mm x 2mm steel strip in brass box fix to rear of spars. NOTE pack one joiner to allow for overlap

1/8" ply sandwich

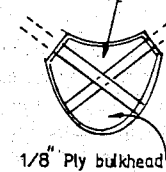
C.G. 2 1/2" From L.E. adjust to suit individual model & pilot preference  
Use RX or TX electronic mixer for ruddavators- the rudder control is considered necessary



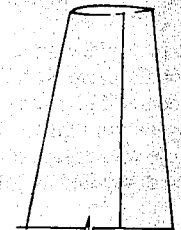
CONTROL MOVEMENTS

- AILERONS 3/8" EACH WAY
- RUDDAVATOR 3/8"
- FLAP + 90° for landing -10° for penetration

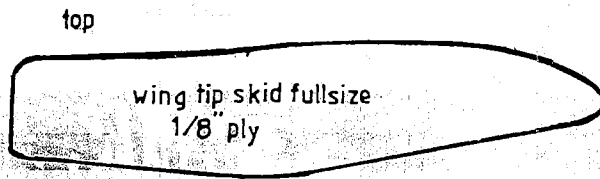
1/4" sq ad brass tube f/glass to fuselage



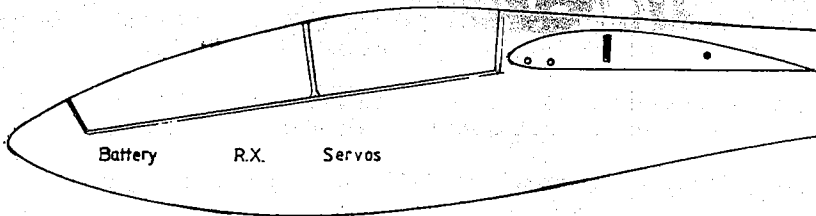
VEE TAIL FIXING



Tail cone supplied detached



Canopy frame 1/4" ply



Full size has retract wheel under L.E. & fixed tail wheel.

Original research & design by John Fletcher. With some redesign now copyright of West Mendip Sailplanes.

Spare parts available from West Mendip Sailplanes 16 Byron Rd Lacking Weston Super Mare Avon Pat Tankle Tel 0934 822147

150" Wingspan 1/4 scale sailplane for slope soaring using 4 function radio operating ailerons elevator rudder & flaps

Copyright West Mendip Sailplanes OCT 85

Byron  
Along

**WPIB**

West Mendip Sailplanes



The other feature is that it's close to a nude beach. Keeping your eyes on the model takes considerable concentration at times!

All the best to all of you, keep it up, and hopefully see you sometime.

Teun

### MEMBERS LIST UPDATE

Alan	Stewart	722663
Alan	Watt	572292
Andrew	Henderson	324709
Andy	Thoirs	712008
Angus	Brown	0569 64144
Bert	Allen	
Bill	Stark	640560
Brian	Ord	698449
Charles	Falconer	05695 288
Colin	Stewart	722663
Collin	Ganley	0569 64276
Craig	Scott	0569 64905
Dave	Morris	742776
Dave	Norris	576279
David	Davidson	692922
Donald	MacDonald	92 62173
Douglas	Allan	790500
Frank	Skilbeck	743052
Gerry	Mitchell	324828
Gordon	Taylor	319075
Graham	Donaldson	486961
Graham	Irvine	
Graham	Philip	0569 64209
Jim	Anderson	641110
Jim	Masson	896794
John	Barnes	06512 2368
John	McConville	824179
Les	Walker	0358 23212
Mal	Satterley	62980
Mon	Sangra	861884
Neil	Masson	896794
Norman	Dunbar	714840
Norrie	Kerr	324722
Paul	Shepherd	741670
Raju	Sangra	861884
Richard	Donaldson	486961
Richard	Holt	06517 2777
Ron	Lock	733693
Ronald	Grant	714454
Rory	Stuart	04676 231
Simon	Boone	780448
Tom	Hamilton	310306
Tom	MacPherson	0569 63868
William	Adamson	06517 2221