ABERDEEN AND DISTRICT SOARERS

Newsletter No.32

7 Ashgrove Road West

Aberdeen

DECEMBER 1987

First of all I would like to give Graham a big thankyou for his sterling work over the last few years producing the Newsletter.

it is intended to publish the Newsletter four times a year. Publication will be in March, June, September and December. The content of the Newsletter is largely dependant on contributions received from club members (i.e.YOU). If you want to see a good Newsletter, get writing. Copy dates will be the end of the month preceeding that of publication. Submissions for the March issue should be forwarded to me by the end of February 1988. Many thanks to all the contributors who've made my job as editor easier for this my first issue.

Frank Skilbeck.

SOCIAL EVENINGS

Two social evenings are planned for early in the new year. The dates are Tuesday 26th January and Tuesday 8th March.

The first evening will include a video of ducted fans (something different) and a repeat of our very successful 'bring and buy' sale. A cover charge of 50p will be made to cover the cost of the video and again 10% of the proceeds from the 'bring and buy' sale will be deducted and donated to charity.

The second evening will include an indoor chuck glider event (must remember to ask Norrie if the results will count towards my BARCS score!). The competition will be duration based with the best two of three flights counting. Anything goes, so get building. Make sure your insurance cover is current!

Both evenings are at the Cammachmore at 7.30. Refreshments will again be provided.

I look forward to seeing you there.

Frank Skilbeck

1988 CALENDAR

Norrie has produced an excellent program of events for 1988. A copy is enclosed with the Newsletter. All members, whatever their interest should find something to suit their taste. Please try and support your club throughout the year both on the flying field and at our social events. It is particularly hoped that the BARCS events will prove to be well attended, not only by our own members, but by other clubs from throughout Scotland.

This list will be updated from time to time. However, it is up to YOU to mark up your diary NOW. No excuses this year like, 'I thought it was last weekend'.

Graham

MINUTE OF AGM 10th November 1987

George Whelan kindly deputised for the chairman and opened the meeting by reading the chairman's report which reviewed the years activities.

The treasurer then circulated copies of the club accounts. These were accepted and showed a healthy balance of £226.90.

The secretary gave a brief report.He raised the question, are competitions required? He reported that the building of new electric winches is going well.

The competition secretary reported that ADS members had obtained some good results in national competitions. Tuesday evenings at Seaton had been well attended, but the % slot Brian Sherriff trophy had seen a poor turnout. A questionaire on competitions was not well supported by members - the results were announced by Norrie. There appeared to be a good interest in the new F3F competitions . Clive Grundy was awarded the Fourdon Scale trophy and the best improver of 1987 was awarded jointly to Dave Norris and Neil Masson.

A motion to reduce the committee to three members was defeated. Clive Grundy and George Whelan stood down and their places on the committee were taken by Frank Skilbeck and Dave Norris. The committee now consists of :-

Graham Donaldson	Chairman
Malcolm Satterley	Treasurer
Dave Norris	Secretary
Norrie Kerr	Competition Secretary
Frank Skilbeck	Social Secretary, Newsletter Editor, Safety Officer

The budget for 1988 was discussed and it was agreed that the ADS fees remain as at present i.e. £4 and £2 for juniors. (SAA fees just agreed are £8 and £2 for juniors).

Competitions for 1988 were discussed. Any suggestions were to be given to Norrie. It was suggested that Saturdays be considered for competitions

Graham Philip reported on the SAA Safety Awards. G.Philip, A.Brown, C.Grundy and S.Lawson were all awarded their bronze award. It was intimated that John McConville is an approved examiner for the bronze award.

A number of other matters were raised:-

1. Any ways to improve co-ordination of flying sites.
2. Agreed that Tuesday evenings and Saturday afternoons prefered flying times.
3. Agreed that new winch batteries be purchased.
4. Agreed that new stickers be purchased.
5. Suggestions for social evenings to committee.
6. Agreed to suggest to SAA that there be Scale Nationals.
7. A request that 'broad brush' descriptions of types of competitions be given in newsletter.
8. Do we wish to remain accociated with the SAA - agreed, yes.

At this point,there being no further business, the meeting closed.

CLUB FEES

As endorsed at the AGM, the club fee will remain at £4.00 for the 1988 season. It would be appreciated if ALL members could be paid up by the end of January 1988, but preferably sooner. Cheques should be made payable to ADS and crossed. Juniors fees are £2.00.

The SAA fee for 1988 has just been agreed - £8.00 and £2.00 for juniors. Payment to SAA is to be made by the end of January at the latest.

To enable members's records to be updated, a form has been enclosed with this newsletter. Please complete it fully and return it as soon as possible to Malcolm Satterly at 11,Mearns Drive, Stonehaven, AB3 2DW. Correct records will ensure that you all receive your newsletters.

Malcolm (Treasurer)

FLYING FIELD DISCIPLINE

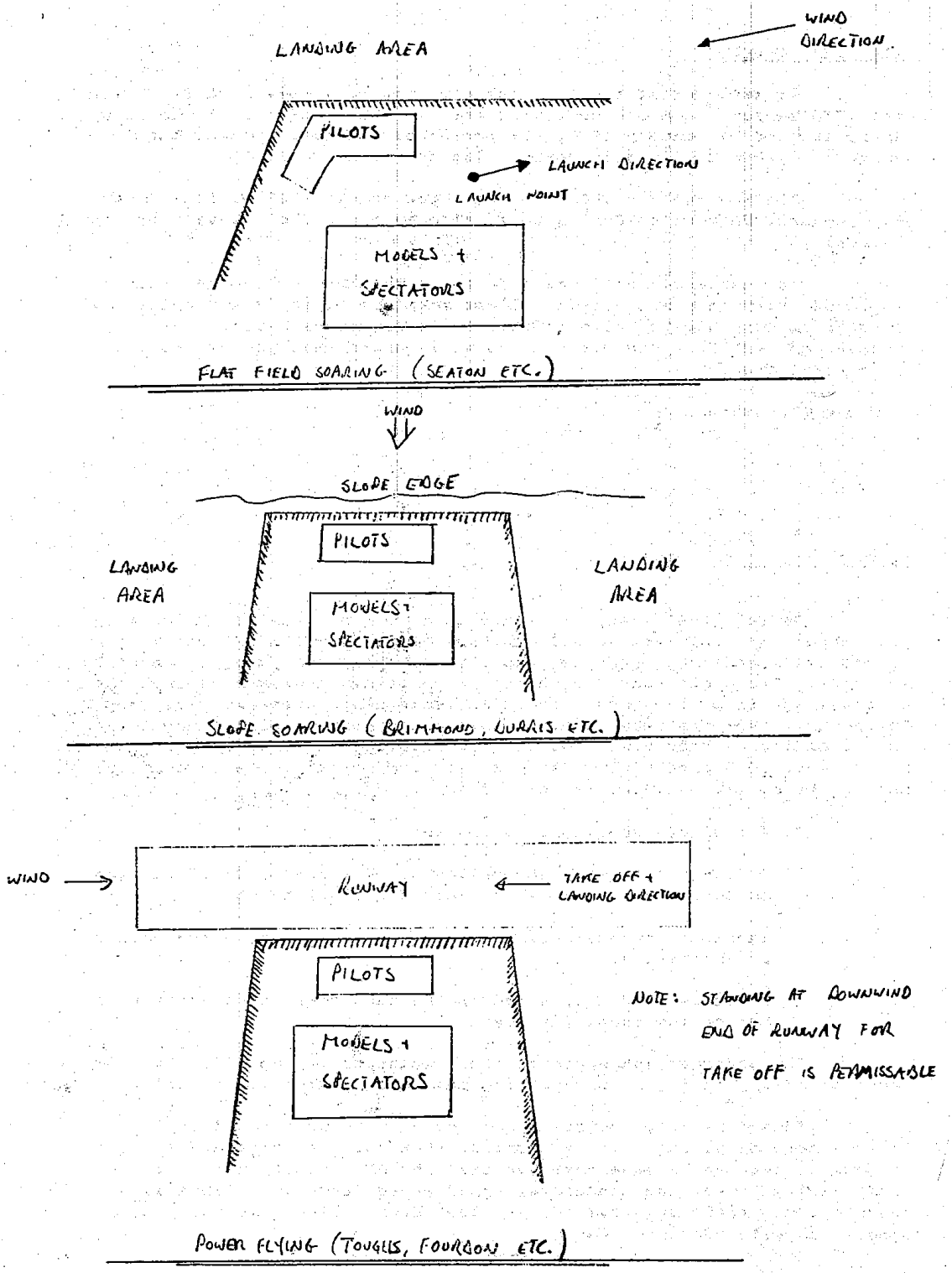
During 1987, ADS have had quite a good year safety wise in that nobody was injured. We did have however, several close calls when fliers and spectators had to rapidly disperse to avaoid wayward aircraft. The root cause of these incidents has always been that the aircraft was in a bad position when something untoward happened. Obviously, the best way to avoid this is to ensre aircraft are never in a potentially dangerous position in relation to other pilots or spectators. Outlined below are a few proposals, which if accepted should reduce the incidents mentioned above.

1. All pilots should stand together
2. Pilots should keep themselves between the aircraft and the onlookers (spectators, non-airbourne pilots etc).
3. Landings or take-offs should never be towards other pilots or spectators.
4. Pilots should only stand in the take-off/landing area when performing these manouvers.

The accompanying sketches show suggested flying field layouts for flat field soaring, slope soaring and power flying (sorry Brian!).

These are only proposals, and comment is welcome. I feel that if some control as outlined is adopted, then the risk of accident will be greatly reduced. Please remember that the ADS constitution states 'low flying over the compound, spectators or other pilots is not allowed'. All these proposals do is lay down guidelines to ensure compliance with our constitution.

Frank Skilbeck


LANDING AREA
WIND DIRECTION
PILOTS
LAUNCH DIRECTION
LAUNCH POINT
MODELS + SPECTATORS
FLAT FIELD SOARING (SEATON ETC.)
WIND
SLOPE EDGE
LANDING AREA
PILOTS
MODELS + SPECTATORS
LANDING AREA
SLOPE SOARING (BRIMMOND, DURRIS ETC.)
WIND
RUNWAY
TAKE OFF + LANDING DIRECTION
PILOTS
MODELS + SPECTATORS
NOTE: STANDING AT DOWNWIND END OF RUNWAY FOR TAKE OFF IS PERMISSABLE
POWER FLYING (TOUGLIS, FOURGON ETC.)

SLOPING OFF

With minimal communication, six club members arrived at Durris on Saturday 14th November for an afternoon's flying. The wind was quite brisk at about 15-20 kts, but it was fortunately a little warmer than usual for this time of year. Visibility was good and even the sun shone for a good time.

Although it was quite windy, once launched, a variety of slopers coped with the conditions and stability looked good all round. The lift was very good, but most models required some down trim to maintain penetration. Assistance was given to two of our newer members until their models were trimmed out. Once this was completed they both flew with apparent confidence. Richard Holt even made his first successful landing after many moons out of the game. Well done Richard!

It was also good to see that even after several hours flying all the gliders returned to the boots of respective owners cars in A1 condition, thus concluding a most enjoyable afternoon.

Just for your information, my Apex 74 (EMP) with ailerons has proved to be a very good all rounder, flying well in in winds at both ends of the spectrum with only minimal elevator trim adjustment required.

HANG GLIDERS

Flying at Durris on Sunday 22nd November we were thankfully approached by several hang glider pilots (it was bloody cool on the hands!) before they assembled their gliders. It was mutually agreed that in the interests of safety we should meet with them to discuss the 'ground rules' for our joint activities. These rules should be in written form and distributed to all members of each club. The intention would be to greatly reduce the risk of a repeat of the incident which occured down south. It is hoped to hold a meeting in the near future. We will keep you informed.

Malcolm Satterley

ADS CLUB BADGES

A new batch of cloth ADS badges has just been purchased. These are available from either Graham Donaldson or Malcolm Satterley at a cost of £1.50. All new members will receive their first badge free of charge on payment of their club fee.

ADS STICKERS

A new batch of self adhesive stickers are now available at 15p each (size 6"x4"). A number of the larger size are also avaialable at 30p each (10"x5"). Malcolm Satterley has the larger size, but all committee members have stocks of the standard size for sale.

A MODEL FOR ROUGH FIELD FLYING

Having only a low wing trainer for fun flying (Cambria CFI), I was looking for a 'Sunday Afternoon' plane that was more suited for take off and landing on less than perfect grass fields. After many hours perusing the magazines, I settled for the new edition from President - the 'Hi Boy Turbo'.

This is a revamp of the well proven President trainer. It retains the same wing section, but has a streamlined fuselage. The kit was purchased locally and on inspection, I was well pleased with the overall quality of wood. The kit is easliy constructed by following a detailed written instruction booklet with sketches of various parts of the assembly. The wings are veneered foam and the fuselage is interlocking plywood sections (including precut servo tray). Construction should hold no fears for the beginner and is rapidly assembled making a very rigid air frame. White Solarfilm was chosen (for lightness) to cover both wings and fuselage. Trim was red and black Solarfilm, just like the picture on the box. It looks every bit a winner in this trim and its sleek lines give it a 'jet' look.

An OS40FP engine was installed and the controls hooked up to give rudder, throttle, elevator, aileron and flaps. A steerable nosewheel was also used.

A suitable day was awaited for its test flight, which occured on a trip to Montrose. The model was set up, checked out - mainly for nosewheel adjustment for straight tracking.

As no 'test pilot' was available on this occasion, all aprehension was thrown to the wind and I hit the throttle. She steadily built up speed, but still required a fair amount of up elevator before leaving terra-firma. The flaps were not used on this occasion (Ididn't have enough nerve). Once airbourne and on reaching a reasonable height the throttle was cut back to 50% and the plane levelled out. The only adjustment required was two clicks on the rudder trim and she flew straight and level (chuffed to bits!)

Loops and rolls were accomplished with very little change of 'heart beat' (mine that is). Inverted flight was also very stable, requiring the minimum of down elevator for level flight.

By the end of several further flights the wind speed was increasing dramatically gusting to 15-20kts. This had very little effect on the flying characteristics of this very stable yet aerobatic model. Landings were undertaken at quite low airspeeds without flaps (should float in with flaps deployed).

My conclusion is that the 'Hi Boy Turbo' is a good first sports trainer, certainly with a quality sports 40 engine. It is also a fine 'Sunday Afternoon' plane with its inherrent stability and slow speed flying characteristics. Flaps have yet to be fully tried and tested, but should only enhance the plane's adaptability to various field conditions.

Malcolm Satterley

SILENT KNIGHT

The idea of electric flight has always been interesting to me, but seemed either fraught with problems or the only way to go. Having flown an electric model before - a Nebula which Logan had converted some five years ago. I was quite willing to try, as the Nebula's performance had been superb. The other crieria had to be transportation, as the car is not that big. It had to collapse and fit in with the other machines. I therefore chose the Silent Knight. It fitted the transportation requirement and it looked quite easy to fly.

The machine is 2m span, with a two piece wing and of all built up construction. It is designed around electric flight. The electric motor choice was something else! After chatting to Mark Haldane (ex Model Shop), I came away with a Kyosho Le Mans 600E motor (later remodeled), two battery packs (one a buggy pack, the other Sanyo fast chargers) and a timer battery charger. This combination has proved very successful - thanks Mark.

Construction was quite easy, the wing being the hardest part, but it turned out very light. The fuselage was coated with two coats of SP113 with a sprayed enamel finish. The wings and tail surfaces were covered in orange Polytex.

As for flying, I can honestly say that I have never had such versatility out of one model; it's been flown everywhere! With the pack fully charged, you can expect about 3 1/2 good lauches and depending on conditions a flight of between 20-35 minutes. One boomer was in excess of an hour.It can fly off the slope either with the battery as ballast or backup power or without the battery and allowed to float around. It's great for by-passing the Heathrow type queue for the power winch!. It can be flown easily by beginners. One of our Dan Air captain friends has even transported his on the flight deck complete with box, charger etc to fly when staying here for a week. Now that's what I call a transportable versatile model.

One modification I made was to the dihedral. Increasing this has made it far more stable and easier to fly. By trying different motors, you can experiment with the power against duration. However, once the power unit has been purchased, then just about anything can be converted to electric. The noise footprint is so small that it is inaudable above 30ft. So it can be flown at any flying site with little or no problem. I can honestly say, that I am totally converted to electric flight and I'm looking at new projects - Zappy, Zippys, Algebra with Amps, High Voltage Vegas or even Watts for Witches.

John McConville

ALGEBRAS - A YEAR ON

During the latter stages of last year, it was becoming increasingly obvious that the much battered stock of thermal and lightweight slope machines was in dire need of replacement.

After some searching, the right combination of modern airframe, easy quick building was found in the Algebra series produced by Dick Edmunds Products. These were suitable because the fuselage could accept different wing sizes and sections, was strong and built up. The wings were also available in the increasingly popular SELIG 3021 section. Hence two aircraft were built; an Algebra 2.5m with ailerons (rudder and elevator wing an option) and a 3.0m version with rudder, elevator and brakes. The 2.5m wings were glassed for slope and windy thermal and the 3.0m wings Solarfilmed.

The most interesting aspect of the models was the wing section's performance, which is largely flat bottomed and somewhat thinner than previous Eppler sections. The speed range of the SELIG 3021 is vast. Both models can be made to fly extremely slowly and with a small amount of down, can accelerate rapidly with no loss of height. This reduces the need for ballast drastically and makes the aircraft more responsive, lighter and safer.

Flying technique varies depending on the type of soaring being performed. When thermal soaring, the aircraft needs to be flown fast to reduce sink and on contact with lift can be slowed up greatly to stay in the lift area. On the slope, to achieve the best soaring performance, the speed can be reduced and this has better results than when flying fast.

A noticeable improvement with the SELIG 3021 over the Eppler sections is its ability to fly extremely slowly and yet retain a high degree of stability. This makes landings very easy and improves the handling so that both machines would make excellent trainers and also very competitive in thermal and cross-country competitions.

John McConville

KIELDER ONE DAY FLOAT PLANE EVENT - 27TH SEPT

After the awful weather at Loch Insh (I was only there on the Saturday), it was a releif to arrive at Kielder Water to be greeted by superb flying weather. It was a super day and there were many interesting models. I got to fly my twin flying boat again - yes it was flown at Loch Insh! This time in calm conditions. Unfortunately on the second flight, the hull was holed and on landing (alighting?) it filled with water and the radio gear was drowned. This incident gave me ample opportunity to inspect the other models and have a good natter.

Many familiar faces were present, Trevor Green with his TAG Special, Dave Kirby with his Bunch Scorpian plus many others with interesting and varied designs. One such design was a mid engined (0.25ci) canard delta flying boat by Stephen Lough which flew exceptionally well (see me for photos). Also worth a mention was a vintage design with an OS25 turning a 12"x6" prop. This model was so quiet it made electic models seem noisy!

Many thanks to Don Foskett for organising a splendid day. I'll be back next year and I would recommend the event to other aquanauts.

ADS 1988 CALENDAR

20.03.88	Cairn O Mount ✓	X-Country, F3F, Fly-in. Cairn Cup
16.04.88	Cairn O Mount ✓	Slope Fly-in
24.04.88	Fourdon ✓	Fly-in, SAA certification.
08.05.88	Balmedie	% slot BARCS league. Brian Sherriff trophy
21.05.88	Brimmond ✓	ADS 10th Aniversary Fly-in
24.05.88	Seaton	Soaring Fun Comp.
11.06.88	Balmedie	% slot BARCS league. Maxwell trophy
28.06.88	Mackie Academy ✓	Soaring/Electric Fun Comp
10.07.88	Balmedie	% slot BARCS league. BOC Nowsco trophy
26.07.88	Seaton	Soaring Fun Comp
23.08.88	Mackie Academy	Soaring Fun Comp
18.09.88	Fourdon ✓	Scale,Concours,%slot,Fly-in,Barbecue
20.09.88	Seaton	Soaring Fun Comp
24.09.88	Balmedie	% slot BARCS league. Sparrow Shield
30.10.88	Cairn O Mount	F3F, Fly-in. Grampian Cup

SOCIAL EVENTS

26.01.88	Cammachmore ✓	Bring & Buy Sale, Video Show
08.03.88	Cammachmore ✓	Indoor Comp
22.10.88	Cammachmore	Dinner Dance (get your clogs polished!)
01.11.88	?	AGM

OTHER EVENTS

15.05.88	Elgin	% slot BARCS league - separate 100S trophy
28.05.88*	?	Radioglide
29.05.88*	"	"
30.05.88*	"	"
18.06.88	Montrose ✓	) 2 day Fly-in
19.06.88	" ✓	" "
25.06.88	Hazelhead ✓	Bon Accord display
26.06.88	" ✓	" "
06.08.88*	? ✓	Scottish Nationals
07.08.88*	"	"
21.08.88	Banchory Devenick	Fly-in ✓
27.08.88*	?	British Nationals
28.08.88*	"	"
29.08.88*	"	"
03.09.88*	Aviemore	2 Day X country
04.09.88*	"	" "
10.09.88	Loch Insch ✓	Waterplane Event
11.09.88	" ✓	" "
02.10.88	Elgin	Taylor trophy
02.10.88	Montrose	Vintage Fly-in

Note

1. Dates marked * are to be confirmed later.
2. ADS Saturday competitions are to start at 1.30 p.m., Sundays 11.00 a.m. Tuesdays 7.00 p.m.
3. Any decision to change the site of a competition or event will be taken at the above times at the site specified.
4. If you are likely to be late for a competition, please phone Norrie on 0224 324722 beforehand and let him have your frequency and anticipated arrival time. He will slot you into the matrix.
5. A record of all scores will be kept. The best 6 will be added together to select a 1988 club champion.

J.M.E. NICAD CHARGER

Are you worried about the condition of your nicads? Do you (like me) tend to have a few short flights each session and then give a full recharge between every session? Folklore states that such repeted action can reduce the actual capacity of your nicads and can totally discharg them. Obviously what we need is a device which will discharge your nicads to a preset level before recharging, thus ensuring maximum capacity is retained.

The JMC Nicad Cycler is designed for just this task, thus ensuring maximum charge and maximum life.

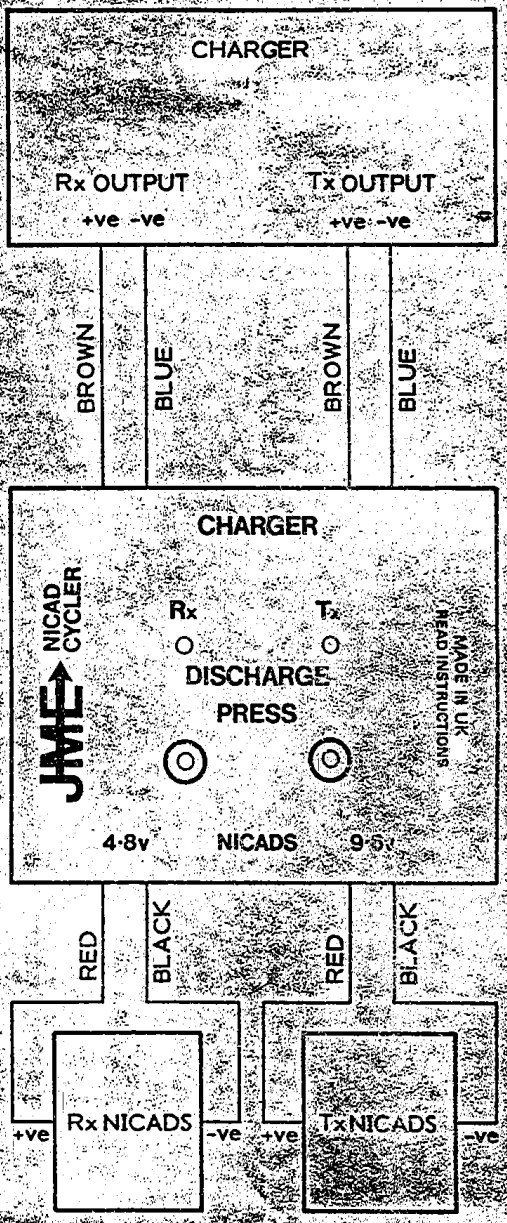
The unit as supplied is a smallish black box (3"x2.5"x1.5") with two push buttons and two LEDs (Tx and Rx). The unit is installed between the charger and the nicad (see sketch). Once the charger is switched on, the charging will commence. When the push button is pressed, the unit will automatically discharge the nicads to a safe level before switching to the recharge mode. The LEDs illuminate during the discharge process.

Other than being used to cycle the nicads, the unit can used to check for faulty connections simply by setting to the discharge mode, 'wiggling' the wires and seeing if the discharge LEDs go out.

The unit works on 4.5v Rx and 9.6v Tx supplies, so check your equipment before purchasing (I cannot use it with my Fleet PCM Tx as this is 10.8v) and note that some manufacturers fit a diode in the Tx to prevent the batteries being discharged.

Overall, quite a useful device. The only comment I would make is that installation could have been neater if instead of having to join the charger leads to wires from the unit, it should have been possible to to make provision to connect the charger leads directly to the unit. What else can I say except that it costs #14.95.

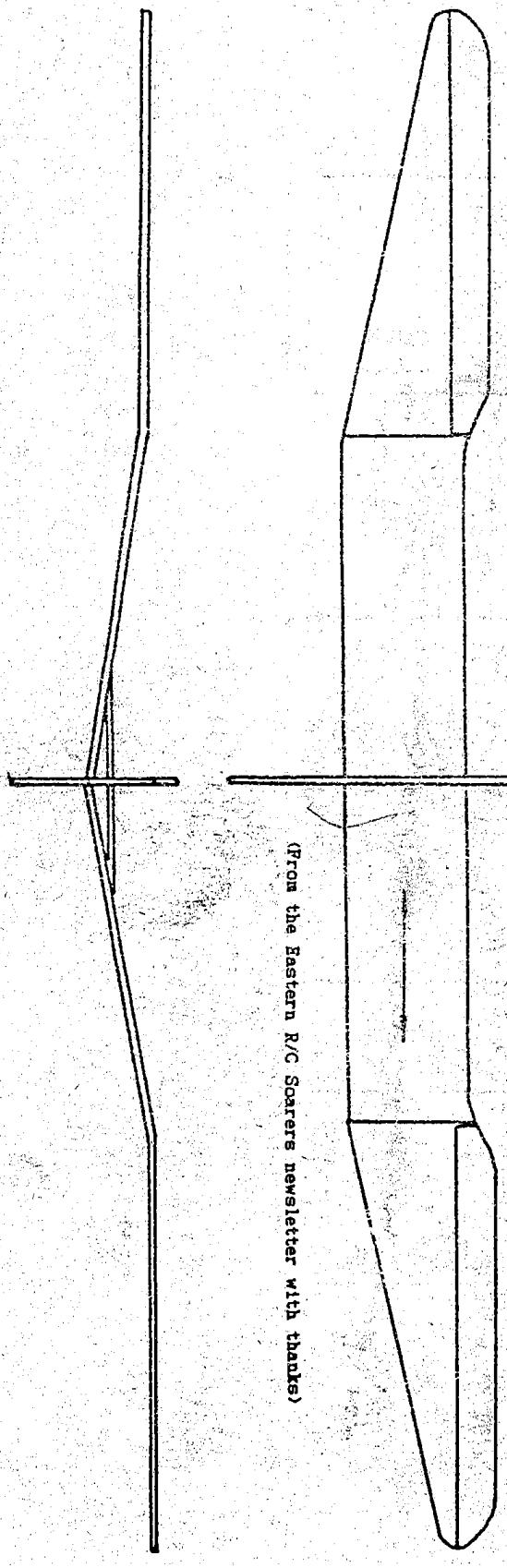
Frank Skilbeck



JME NICAD CYCLER

MODEL NO:- NC1

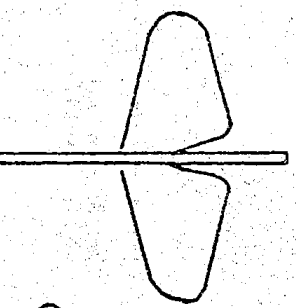
CONNECTION DETAILS:-

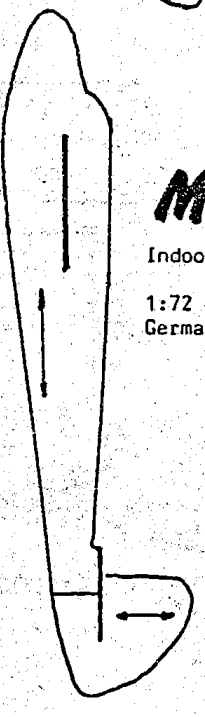


Construct from light 1/32nd inch sheet balsa noting the arrows which indicate the direction of the grain. Make the wing in one piece, sand to section, score the wood at the dihedral breaks, crack along the scored line to the required dihedral and glue.

Make the fuselage noting the slight pedastal for the tailplane mount, sand edges and slot for wing. make tailplane and fin sanding to section and gluing on place.

FLYING: Balance with plasticene so that the C.G. is somewhere under the wing, my fingers are too large to be any more accurate!. Test glide and adjust nose weight to give a flat glide. The original flies surprisingly well indoors or outside on a calm day. So there you are, you thought only RCM&E or Radio Modeller gave full-size plans, try a mini Minimoa, they are great fun and nearly indestructable. Or, of course, you could scale up the drawing 72 times and have a real one!





Minimoa

Indoor flying scale glider.

1:72 scale model of the 1935 German design of Wolf Hirth.

(From the Eastern R/C Soarers newsletter with thanks)