

	<h1>NEWClarion</h1> <h2>SAM 1066 Newsletter</h2> <p>Society of Antique Modellers Chapter 1066</p>	
	Issue nc102025	October 2025

Affiliated to



Club No. 2548

SAM 1066 Website:

www.sam1066.org

	Editor:- John Andrews 12 Reynolds Close Rugby CV21 4DD	Tel: 01788 562632 Mobile 07929263602 e-mail johnhandrews33@outlook.com

I Pad users: If you are having trouble opening the New Clarion, hold your finger on it to display a menu, then select "open in new tab". You will find the new tab to the right of the SAM1066 tab.

	Contents	Page
Editorial	-	2
Coventry Gliding Center & Buckminster	John Andrews	3
Topical Twists Oct 1956	Pylonius	6
Senator 75 th . Anniversary	Tony Rushby	7
The 'String Bag'	Wikipedia	8
Here and There	Model Aircraft October 1950	11
Indoors Isn't for Everyone No.91	Nick Peppiatt	12
Heard at the Hangar Doors	Aeromodeller October 1955	15
Other Hobbies	John Andrews	17
Engine Tests: The Sabre 35	Model Aircraft October 1955	19
FF Nationals Results	Roger Newman	21
Vintage HLG/CLG	Geoff Smith	25
Aeromodelling 1955	Aeromodeller Annual 1955-56	26
Clarion 2004	John Andrews	27
A Bit More for the Board	Tony Shepherd	29
Radio Conversion	Barrie Russell, New Zealand	31
Notes from North Wales	Roger Newman	35
Secretary's Notes for September	Ray Elliottt	39
Plans for the Month	Roger Newman	40
Events and Notices	-	43
Provisional Events Calendar	-	49
Useful Websites	-	50

Editorial

The **10th Grande Coupe de Birmingham** will now take place on the 6th or 7th of December and not the November date previously advertised.

So, what comment can I make about the Sculthorpe Nationals, well nothing really as my plea for articles or comments fell on deaf ears and nothing was forthcoming.

For myself, I've had another trip out thanks to Martin Pike who paid me another visit and piloted me to the Glider Centre again and Buckminster.

What have we got for this issue?

-) First up I report on my second visit to the Gliding Centre and the following days foray up to Buckminster for the successful Senator competition.
-) Pylonius in 1950 takes swipe at the competition modeller who forms new clubs in order to get some model holders. The new version of boy scout, the Aero Scout comes under his scrutiny, and D/T fuse lighting Perils. Finishing up with the perils of the aeromodelling sons enquiries.
-) Tony Rushby reports on the Buckminster Senator day and lists the competition results.
-) I've dug out the Fairy Swordfish from Wikipedia, seems it was a more formidable weapon than you would have thought.
-) Here and There from 1950 highlights the Wakefield flyer Aarne Ellila and emphasises that his main aim in his Wakefield models is to achieve Consistency & reliability and states a few facts. The use of Dayglo paint is touched upon as a means of achieving long range visibility.
-) Nick Peppiatt reports on the 'Grant Mimloct' Cloud Tramp international mass launch and digs into Supercapacitor driven models.
-) 1955 Heard at the Hangar Doors reports on a novel American Navy seaplane with a float more like a surfboard. The MAP publishers inform of a future expansion in their modelling titles. The RAF modelling association gets a mention. Disappointment is expressed at the lack of support from aeromodelling at the Engineering Exhibition.
-) As support for the 'Other Hobbies' series, I weigh in with my piece. I do not have any other hobbies but I have been a collector of various sports so I brag a bit about my accomplishments, or lack of, in the sporting arena.
-) The engine test is the Australian Sabre 35, a useful looking power plant.
-) Roger Newman presents the full results of the Sculthorpe Nationals, proof that they did take place.
-) One Geoff Smith berates Gavion Manion over his opinion that his proposed HLG/CPG glider is the first event of its kind.
-) I present a piece from the Aeromodeller Annual of 1955 which outlines activities at that period of our aeromodelling history. Followed by an article of mine from 2004 Clarion.
-) Tony Shepherd writes on the new to him covering system, Eze Tissue and dope.
-) Barrie Russell, editor of NZ mag Propwash, as promised, gives the details of the radio conversion to enable him to fly radio on a single button like the old days.
-) Notes from North Wales by Roger Newman looks back at old Slingsby Gliders and also comments on BMFA Nationals.
-) The Secretary's notes for October highlight E20 and his own model for the class.
-) This issue wraps up with Roger's Plans for the Month.

Editor

Coventry Gliding Center 17th 2025

Our Membership Secretary & Webmaster Martin Pike came by train from North Wales to stay with me again. I picked him up from the railway station carrying his bright yellow model box containing his Senators and a couple of other models, couldn't miss him with that box. Martin came Saturday evening, so we had Sunday spare to visit wife Rachel, in the nursing home, on her birthday. We spent the morning hanging up birthday cards and opening many gifts of chocolate.

We left the home and travelled to Kilworth Springs Golf Club to partake of some Sunday lunch prior to visiting Coventry gliding club again in the afternoon. There was continuous activity at the gliding center as the wind and weather were favorable.



We spent a pleasant afternoon watching the aircraft tugs and gliders come and go. They did not use the winch launches as I think the wind direction was a little offline.

Senators at Buckminster August 18th 2025

On the Monday we loaded up my car with Martins gear and set off to Buckminster for the Senator competition. There were 35 cars or more by the time the event commenced, a really good turnout these days and proof that the BMFA HQ at Buckminster can be used for Free-Flight competition. The crops in the surrounding fields had been harvested and the farmers had no objections to competitors recovery from them, if necessary.



I had bought a rugged folding chair which Martin set alongside the wind break of Peterborough's Pete Gibbons. You can just make it out alongside Pete's daughter behind Martin's yellow box, I'm taking the photo of course. I was able to rise from my new chair unaided and I introduced myself to the hedgerow a couple of times, a good investment. Excursions into the surrounding fields were not necessary as the Senator Competition was a Three Flight target time affair. The target time was 60 seconds per flight and the nearest total deviation to a three flight total of 180 seconds would be the winner. I do not know the name of the winner but I stood next to him at the prize presentation and I believe he told me that his winning time was 185 seconds.





Martin prepares one of his Senators (seems to be in his yellow period)

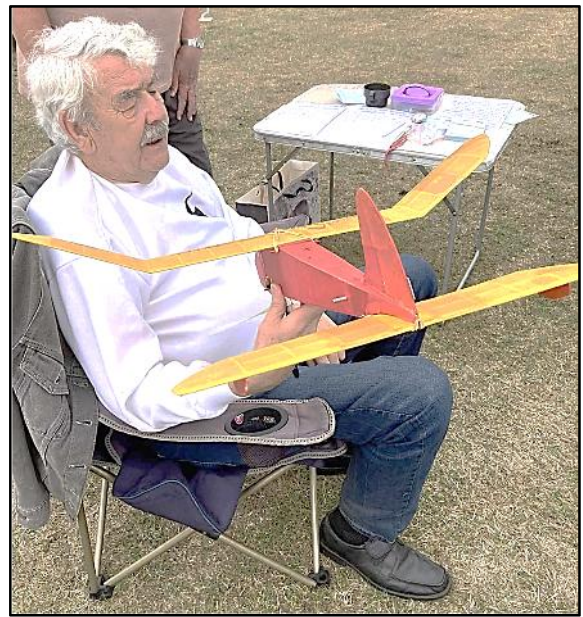


Pete Gibbons winds an own design P30 for a trimming flight





Some launches were good but some left a little to be desired



There were one or two minor excursions from the field. Peterborough's Bert Whitehead trudges back to base having poled his model out of the hedgerow. Ken Bates rests, having spent a couple of hours in the wood behind the car line looking, with others, for his errant model



which had refused to turn after launch and finished up 8M or so hidden up in the trees behind us.

The final event of the day was a mass launch of Senators, marshalled here by CD Tony Rushby, the winner being the highest model after 40 seconds flight time. Pete Gibbons had the unenviable task of deciding the winner. How he did it with models all over the place beats me.

John Andrews

Topical Twists

by PYLONIUS

Foundered Members

A necessary but tiresome sideline of the keen modeller is club founding. Any contest type worth his salt can be relied upon to start at least two new clubs in the course of a season, with a couple of stray secretaryships thrown in for good measure.

At the outset of his career the Keen Modeller might be privileged to have a round half-dozen model holders at his constant disposal, though he might think they'd be less round were they to do an occasional spot of retrieving. By the end of the first season he will almost certainly be able to describe himself picturesquely as a Lone Wolf, hungrily scouring the local flying areas for model-holding victims. When he chances



upon his prey—perhaps a couple of kids innocently playing with a chuck glider—he pounces savagely. Before the little blighters know what's happened they are paid up founder members of a new club, doomed to a nerve-racking term of bone-wrenching model holding.

Inevitably, alas, the slave labour is lured away by the glamorous enticements of Davy Crockett, and the Lone Wolf is on the prowl once more.

After a few seasons of model founding, the problem of club titles becomes acute. All the short and sweet district variants will have been exhausted, and with officialdom frowning upon Cement Slingers, Balsa Butchers, and suchlike breezy bands, club names are apt to become a trifle ponderous. The latest example of this to catch my eye is the North West Middlesex Flying Club (Thermaleers). What a Thermaleer is can be anyone's guess, but I presume it to be the sort of expression commonly adopted when a clubmate's D/T-less model hits a riser.

Come to think of it, this whole club business is a bit of a baffler, particularly on the financial side. You imagine you belong to an average sort of club, where currently the members are in open revolt at the membership fee being raised from 1s. to 1s. 3d. per month, when you read in club news that unknown clubs by the score are building their own clubhouses. Club types crouched in draughty attics or huddled in the back room of the local model shop must go green with envy over these fabulous reports of spacious, detached club premises, with all mod. cons. for mods, situated within two minutes of the airfield... etc. Their only consolation is the thought that there couldn't be much in the way of model flying in all this splendour, model flying being essentially a poor man's hobby. There are the radio types, of course, but they soon finish up with the church mice brigade.



Job-a-Mod Week

The old fashioned Boy Scout used to spend his time in camping, fire-making, wood-chopping, and other primitive sufferings. His modern counterpart is the Air Scout, who, it seems, is just another aeromodeller in a sympathetic disguise. Instead of woodcutting axes he is more concerned with

aerodynamic axes, and in many cases his fire raising techniques are confined to D/T lighting. I might also say that, as a modelling scout, he should know his wolf cub drill, but we'll skip that.

As a smoking modeller I'm interested in the Boy Scout trick of making fire by rubbing two twigs together. The only method I know of lighting a D/T fuse is by poking at it with a lighted cigarette. This means that after a hectic day's model flying I stagger home green about the gills. Perhaps if we smoking modellers could learn this magic twig trick we'd really benefit from a day in the open air.

* * *

Family Affairs

I should have thought that a man reaches the age of discretion long before his son is old enough to begin to ask embarrassing questions. So when inquisitive son poses the inevitable "How do diesels work, Daddy?" you would imagine that Daddy, in his discretion, would idly flip over a few bob for pestering offspring to buy one of the countless books on the subject, and settle down to some mature and intellectual pursuit, having first tuned in "Gun Law" to suitable brilliance.

But modern dad, it seems, is still very much the enthusiastic boy according to a recent letter from one such patriarch. When growing son gets into difficulties with his 3s. 6d. kit, modern dad doesn't merely go to his assistance, but clears him off the kitchen table to take over the family model building himself.

Son is exiled to the wild prairies of "Gun Law," whilst dad soon learns that the inability to build 3s. 6d. kits is not peculiar only to dim son, but must be something in the nature of an ancient family curse.

Dad, however, perseveres with desperate tenacity until eventually an assemblage of balsawood and tissue bearing a remote resemblance to a model plane is ready for the flying field. Then comes the worst shock of all. Apart from the torture of building the fiddly things, you have to learn to fly them. At this point Dad carts home the wreckage and proceeds to write to the model journals in the most glowing terms of this wonderful hobby.

Possibly a reason why so many Daddy-age men take the plunge into the aeromodelling abyss is that it is not now such a public disgrace to venture out with a model plane—particularly if you have a growing son to carry it. And it might well be that Dad himself has no say in the matter. With model flying becoming as fashionable as motor-scootering among the ladies, poor old Dad lies under the constant threat of being jollied out of his favourite armchair in order to take the family to a model rally.

Why all the ladies are scrambling to get on the model bandwagon is a greater feminine enigma than the hats they wear. Only a few years ago any spirited young woman would be half-way home to Mother before hubby had cut out the first bulkhead (which would give her plenty of time, anyway). Now, the flying fields are simply swarming with fair sweepers-up-of-balsa-dust. Outside this homely chore, however, the model fashion craze is a rather one-sided affair. The men are driven to do all the donkey work of building and flying the models, while the presence of the ladies is merely to add glamour to the social scene.

Generally, the lady supporters run to three types. The young and leggy damsels who frolic about in the flying areas; youthful matrons who promenade the kids around the ice-cream kiosks, and elderly and less active mums immovably entrenched in the car park and picnic locales. We might also mention the Grannies, who, under no circumstances, ever leave the cars.

With notably few exceptions the ladies have the good sense never to touch a model plane, though the minority that do fly them seem to outstrip the male competitors in more ways than one.



**Buckminster, Senator 75th Anniversary event
Monday 18th. August 2025**



The weather was a bit dismal early on with light drizzle which soon cleared and it was fine for the rest of the day. The wind strength was light, 6-10mph, and conditions were quite flyable for the competition.

There was a good turnout, a bit slow early on but by 1pm there was a lot of flying going on, Senators in abundance, the air was full of them. Competitors trimming for their target 60 seconds flight time. Many other types were being flown, some well-known and the odd rarity. The easy going event format seemed popular to most, some stating so direct to CD Tony Rushby telling him how much they had enjoyed the event.

The principal event was the precision event for Senators: Nearest to a three flight total of 180 seconds.

By the time the event got underway there were in excess of 35 cars lined up.

Entries were:

Senator Precision; 13 - Senator Mass launch; 9 - Senator Concors: 5
Cloud Tramp; 5 - 25" Vintage Rubber; 5
37 total entries.

Results

Senator Precision: 1st. Richard Falconer
2nd. Joe Northrop
3rd. John Wheeler

Senator Mass Launch - Steve Fielding

Senator Concors - John Wheeler

Under 25" Vintage Rubber: 1st. Chris Grant
2nd. Bert Whitehead

Cloud Tramp: 1st. Steve Fielding
2nd. Bert Whitehead
3rd. Andy Green

Thanks to CLEEMAC for sponsoring the event & Peterborough's assistance.

Tony Rushby

The Fairy Swordfish



Design

The Fairey Swordfish was a medium-sized biplane torpedo bomber and reconnaissance aircraft with a fabric-covered metal airframe. It had folding wings. In service, it received the nickname *Stringbag*; this was not due to its profusion of struts, spars, and braces, but a reference to the seemingly endless variety of stores and equipment that the type was cleared to carry. Crews likened the aircraft to a housewife's string shopping bag, common at the time and which could accommodate contents of any shape.

The primary weapon of the Swordfish was the aerial torpedo, but the low speed of the aircraft and the need for a long straight approach made it difficult to attack well-defended targets. Swordfish torpedo doctrine called for an approach at 5,000 feet (1,500 m) followed by a dive to torpedo release altitude of 18 feet (5.5 m). Maximum range of the early Mark XII torpedo was 1,500 yards (1,400 m) at 40 knots (74 km/h; 46 mph) and 3,500 yards (3,200 m) at 27 knots (50 km/h; 31 mph). The torpedo travelled 200 feet (61 m) forward from release to water impact, and needed another 300 yards (270 m) to stabilise at preset depth and arm itself. Ideal release distance was 1,000 yards (910 m) from the target.

The **Fairey Swordfish** a retired biplane torpedo bomber, designed by the Fairey Aviation Company. Originating in the early 1930s, the Swordfish, nicknamed "Stringbag", was principally operated by the Fleet Air Arm of the Royal Navy. It was also used by the Royal Air Force (RAF), as well as several overseas operators, including the Royal Canadian Air Force (RCAF) and the Royal Netherlands Navy. It was initially operated primarily as a fleet attack aircraft. During its later years, the Swordfish was increasingly used for anti-submarine and training duties. The type was in frontline service throughout the Second World War.

Despite being obsolescent, the Swordfish achieved some spectacular successes during the war, including sinking one battleship and damaging two others belonging to the *Regia Marina* (the Italian navy) during the Battle of Taranto, and the famous attack on the German battleship *Bismarck*, which contributed to her eventually being sunk.

Swordfish	
	
Swordfish LS 326 in flight in 2013	
General information	
Type	Torpedo bomber
National origin	United Kingdom
Manufacturer	Fairey
Built by	Fairey , Blackburn Aircraft
Primary users	Fleet Air Arm , Royal Navy
	Royal Air Force Royal Canadian Air Force Royal Netherlands Navy
Number built	2,301 (892 by Fairey and 1,409 by Blackburn)
History	
Manufactured	1936–1944
Introduction date	1936

Swordfishes sank a greater tonnage of Axis shipping than any other Allied aircraft during the war. The Swordfish remained in front-line service until V-E Day, having outlasted some of the aircraft intended to replace it.

Origins

In 1933 Fairey, who were experienced in the design and construction of naval aircraft, began development of an entirely new three-seat naval aircraft, intended for the twin roles of aerial reconnaissance and torpedo bomber. Receiving the internal designation of *T.S.R. I*, standing for *Torpedo-Spotter-Reconnaissance I*, the proposed design was a biplane powered by a single 645 hp Bristol Pegasus IIM radial engine. The company initially chose to pursue the project as a self-financed private venture while both customers and applicable requirements for the type were sought. Development of the *T.S.R. I* was in parallel to Fairey's activities upon Air Ministry Specification S.9/30, for which the company was at one point developing a separate but broadly similar aircraft, but powered by a Rolls-Royce Kestrel engine and having a different fin and rudder configuration.

Significant contributions to the *T.S.R.I*'s development came from Fairey's independent design work on a proposed aircraft for the Greek Naval Air Service, which had asked for a replacement for the Fairey III F Mk.IIB, and from British Air Ministry specifications M.1/30 and S.9/30.

Fairey promptly informed the Air Ministry of its work for the Greeks, whose interest had waned, and proposed its solution to the requirements for a spotter-reconnaissance plane ("spotter" referring to the activity of observing and directing a warship's fall of shot). In 1934 the Air Ministry issued the more advanced Specification S.15/33, which added the torpedo bomber role.

The prototype, *F1875*, made its maiden flight from Great West Aerodrome, Heathrow on 21 March 1933, flown by Chris Staniland. *F1875* made various flights, including several while re-engined with an Armstrong Siddeley Tiger radial engine before it was refitted with the Pegasus engine. On 11 September 1933, *F1875* was lost during a series of spinning tests in which it became unable to recover; the pilot survived the incident. Prior to this, the prototype had exhibited favourable performance, which contributed to the subsequent decision to proceed with the more advanced *T.S.R II* prototype, which had been specifically developed to conform with the newly issued Specification S.15/33.

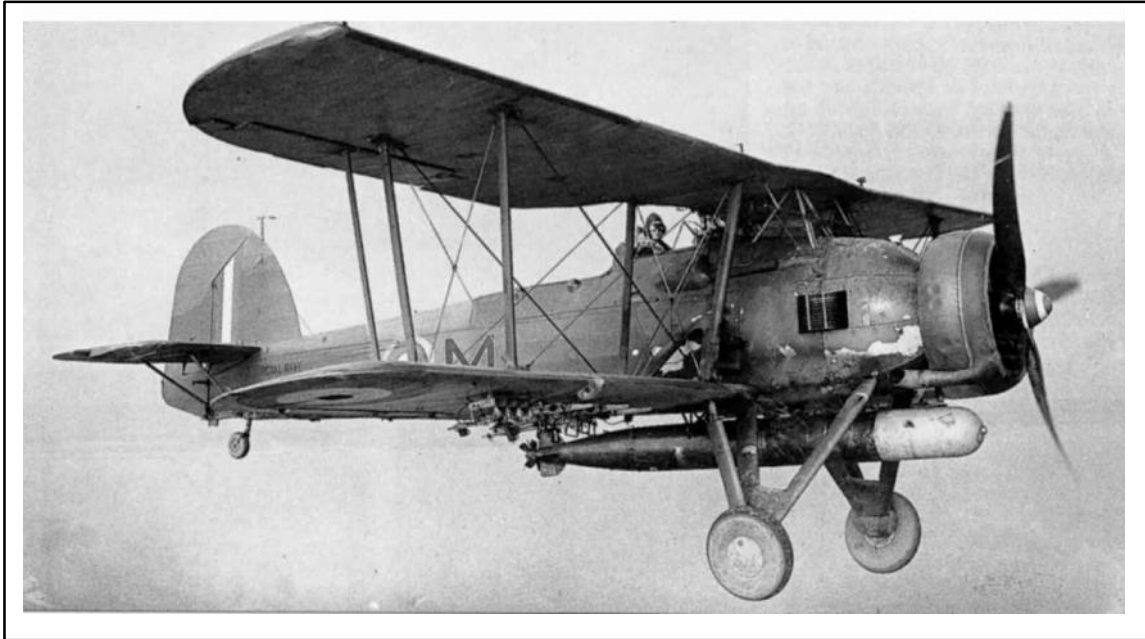
On 17 April 1934, the prototype *T.S.R II*, *K4190*, made its first flight, flown by Staniland. Compared to the previous prototype, *K4190* had a more powerful version of the Pegasus, an additional bay in the rear fuselage to counteract spin tendencies, and the upper wing was slightly swept back to account for the increased length of the fuselage. During the ensuing flight test programme, *K4190* was transferred to Fairey's factory in Hamble-le-Rice, Hampshire, where it was fitted with a twin-float undercarriage in place of its original land-only counterpart; on 10 November 1934, the first flight of *K4190* in this new configuration was performed. Following successful water-handling trials, *K4190* conducted a series of aircraft catapult and recovery tests aboard the battlecruiser *HMS Repulse*. *K4190* was later restored to its wheeled undercarriage prior to an extensive evaluation process by the Aeroplane and Armament Experimental Establishment at RAF Martlesham Heath.



In 1935, following the successful completion of testing at Martlesham, an initial pre-production order for three aircraft was placed by the Air Ministry; it was at this point that the T.S.R II received the name *Swordfish*. All three pre-production aircraft were powered by the Pegasus IIIM3 engine, but had a three-bladed Fairey-Reed propeller in place of the two-bladed propeller used on the prototype. On 31 December 1935 the first pre-production Swordfish, K5660, made its maiden flight.

On 19 February 1936, the second pre-production aircraft, K5661, became the first to be delivered; the final pre-production aircraft, K5662, was completed as a floatplane configuration and underwent water-based service trials at the Marine Aircraft Experimental Establishment at Felixstowe, Suffolk.

Production and further development



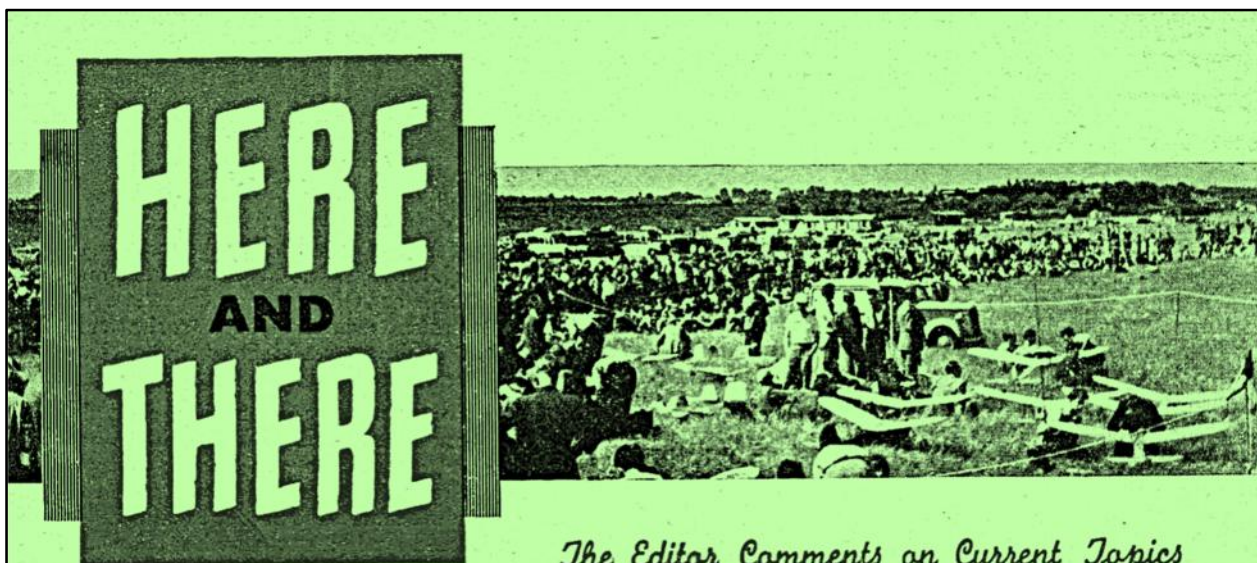
In early 1936 a production contract for 68 aircraft was received, as the *Swordfish I*. Manufactured at Fairey's factory in Hayes, West London, the first production aircraft was completed in early 1936 and the type entered service with the Fleet Air Arm (FAA) in July 1936.

By early 1940, Fairey was busy with the Swordfish and other types such as the new Fairey Albacore torpedo bomber. The Admiralty approached Blackburn Aircraft with a proposal that manufacture of the Swordfish be transferred to them; Blackburn then set up a new fabrication and assembly facility in Sherburn-in-Elmet, North Yorkshire. Less than a year later, the first Blackburn-built Swordfish made its first flight. During 1941 the Sherburn factory assumed primary responsibility for the fuselage, along with final assembly and testing of finished aircraft.

Efforts were made to disperse production and to use shadow factories to minimise the damage caused by *Luftwaffe* bombing raids.

Major sub-assemblies were produced by four subcontractors based in neighbouring Leeds. Initial deliveries from Sherburn were completed to the Swordfish I standard; from 1943 onwards, the improved *Swordfish II* and *Swordfish III* came into production and superseded the original model. The Swordfish II carried ASV Mk. II radar and the lower wings had metal undersurfaces to allow the use of 3-inch rockets. Later-built models also had the more powerful Pegasus XXX engine. The Swordfish III was fitted with centimetric ASV Mk.XI radar mounted between the undercarriage legs, precluding carrying torpedoes, and retained the Pegasus XXX powerplant.

Production of the Swordfish ended on 18 August 1944. Almost 2,400 aircraft had been built, 692 having been constructed by Fairey and a further 1,699 by Blackburn at their Sherburn facility. The most numerous version of the Swordfish was the Mark II, of which 1,080 were completed.



The Editor Comments on Current Topics

WHAT'S IN A NAME?

After the Wakefield Trophy Contest had ended the official Finnish photographer took photographs of the competing teams. He had some difficulty in writing down the names of the British lads and Ron Warring, to save a long argument, pointed to the label on his model. The photographer was highly delighted at this easy way out of his problem and promptly wrote down—Mr. If Found! Believe it or not, it's true!

RELIABILITY PAYS

Those of us who have been able to get to know Aarne Ellilä quite well were not unduly surprised at his success in winning the Wakefield Trophy for the second year in succession.

In the first place he is acknowledged by all the Scandinavian experts to be the leading Wakefield designer and flyer in that part of the world. They should know, because Ellilä has spent long periods in Norway and Sweden and has won many Wakefield contests there. He quite frankly admits that his designs are very largely influenced by Swedish ideas.

Secondly, he has made a close study of Wakefield design problems for many years and has largely concentrated on this type of model. He aims to obtain absolute consistency and reliability rather than spectacular "hit or miss" thermal flying. That he has been able to achieve this is clearly shown by the performances of his models in varying weather conditions.

There were some people who considered that Ellilä was rather lucky to win with a 10-year-old model in 1949, but what they did not know was that he quite deliberately chose to use this model instead of a new design which, although capable of a better performance than the old one on most occasions, was not so consistent generally.

This is a typical example of his insistence on reliability and a close study of the details of the modifications of the 1949 design which he incorporated in this year's model (see page 348) reveals that they nearly all have this object in view.

Ellilä's 1950 model had a still air duration of at

least 45 sec. more than any other entry in the contest and it does seem that our Wakefield designers will now have to seriously consider the tandem-motor arrangement and other means of increasing the effective motor run. British team members, J. L. Pitcher and J. B. Knight are already experimenting along these lines, so I understand.

WEST ESSEX HUMOUR

West Essex club member, L. Randall, who is responsible for their very lively News Letter, has a well developed sense of humour as the following extracts from the latest issue will show:—

We regret that the "Beginner's Elementary Glider Kit" which was intended for the first prize in our gala speed event, has not been forthcoming from the manufacturers as promised. However, we are happy to state that at the last moment we have managed to secure a copy of "Every Boy's Bumper Book of Cut-Out Models." This we feel sure will be an acceptable alternative.

Whilst it is admitted that two W.E. members were observed in the confines of a local mental hospital, it must be pointed out that they were only there to retrieve a lost model, and not, as malicious gossip would have it, to enjoy the benefits of the treatment. After all, it is a well known fact that no saner group of individuals exist than we modellers, and $\frac{1}{2}\%$ —/ & ? $\frac{3}{8}$ L.— $\frac{3}{4}$ xy— (excuse the typing, but it is rather difficult whilst wearing a strait-jacket).

BRIGHTER MODELS

Many devices have been employed by contest flyers to assist time-keepers to keep their models in sight, e.g., silver doped free-wheeling propellers and strips of tin foil attached to fuselages. One well-known London modeller is at present experimenting with the use of "Dayglow"—the printing ink which you have probably seen on posters and which is claimed to reflect three times more light than normal colours. We understand that even if the experiments are successful there is little likelihood of this product becoming available for model aircraft purposes as the scope of its use is very rigidly restricted by licence.

An Outdoor Adventure - Grant MIMLOCT, 2nd August 2025

This was the day of the thirtieth Memorial International Mass Launch of Cloud Tramps to celebrate the achievements of Charles Hampson Grant with his spar tractor design. It was a very pleasant afternoon, with light winds, and I ventured over to Epsom Downs to take part in the 5p.m. launch.



Getting ready. Peter Michel launching for a test flight. Great to see that he is still active!

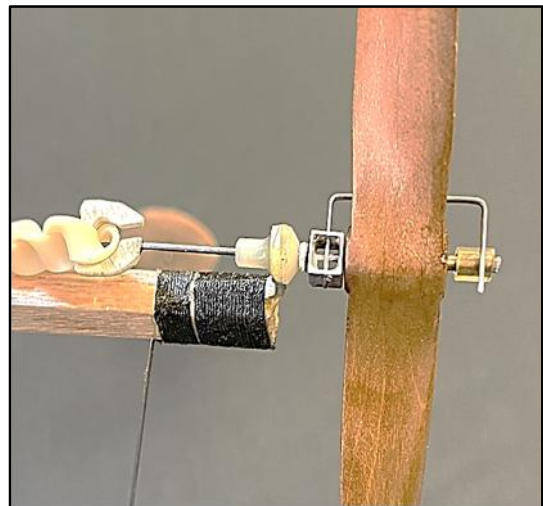


Robin Willes and grandson, Fred, also had another spar tractor design, Gordon S Light's Utility from Air Trails, October 1939

I wind my Cloud Tramp using a simple stooge consisting of a piece of wood with a U-shaped aluminium bracket attached. A wire pin passes through a piece of square brass tube soldered to the prop shaft, to which the wire prop drive is attached, and through holes in the bracket. The wood is held under a foot whilst winding the model from the rear.



Cloud Tramp attached to its stooge with a wire pin.



Repaired Cloud Tramp propeller drive.

Come a few minutes to five, Tony Tomlin, who was running the event on behalf of the Epsom Downs MAC, gave the signal to start winding. In my case, after a few hundred turns, there was an ominous whirring sound from the propeller drive end and I found that the soldered joint connecting the propeller drive to the shaft had failed. At the mass launch time I joined the eleven other participants, but all I could do was chuck and hope. I had the shortest flight, but at least I did not have to walk far to retrieve!

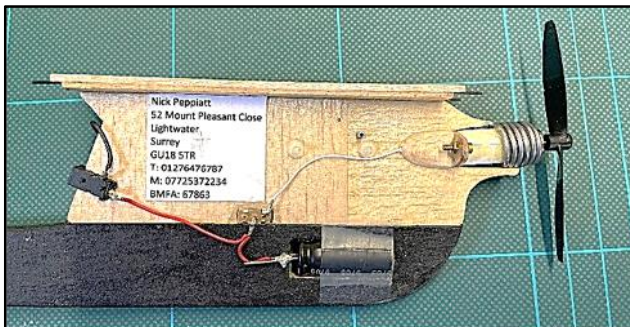
Fortunately, I had brought my supercapacitor powered Micro Starduster, see last month's column, along and had a number of nice flights. These again showed that the cg position was good (the best position? Who knows?! Again see last month's column). The viscous damper DT, which was set for about 45 secs, was usefully employed on a number of occasions. For charging I was using the box supplied with a Chinese produced supercapacitor powered foamie. This is fitted with three AA sized alkaline batteries. I found that a fifteen second charge gives the Micro Starduster quite a sprightly climb.



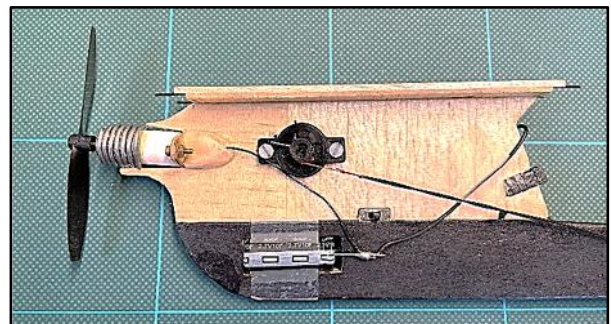
'Airy' foam plastic supercapacitor powered ARTF aircraft.



The three AA cell charger with barrel jack plug.



Starboard side of Micro Starduster pylon, showing supercapacitor installation. The 8.5x20 coreless motor is retained in a paper tube with a dab of UHU



Port side of pylon, showing supercapacitor installation, start switch and shirring elastic activated viscous DT timer.

Supercapacitor charging

The instructions for the Chinese ARTF indicate a maximum charge time of 20 s for the 5 F 2.7V supercapacitor fitted. Its charger, also shown above, has a barrel jack plug 2.5mm od by 0.7mm id. I obtained some suitable sockets so that the 10F supercapacitor on the Micro Starduster could be charged. The socket is mounted in the rear of the pylon. The rated voltage of this supercapacitor is 2.7V. I carried out some tests to determine what the capacitor was being charged to: -

Charge time (s)	Supercapacitor voltage
5	2.23
10	3.03
15	3.35
20	3.63

The no load voltage of the charger at the start was 4.65V.

There is clearly a relatively slow build up of voltage with time. One of the limiting factors is the internal resistance of the charger battery. I measured this at about 1Ω .

I have a rig set up for measuring the internal resistance of single cell LiPos, as described Stew Meyers' 'Electric Flight' column in the January 2014 edition of Flying Models. It consists of a digital multimeter set as a voltmeter to measure the unloaded and loaded battery voltage and a multimeter set to measure the current when the resistance load is switched on.

The resistance is a torch battery of about 10Ω . The internal resistance is calculated by dividing the voltage drop (Volts) by the current (Amps). It was very straightforward to use this to assess the internal resistance of the supercapacitor charger.

There are clearly modellers who have looked at supercapacitor power in much more detail. For instance, Sam Brauer has published a very interesting article on the Stealth Squadron website :

Supercapacitor Electric Power for FAC Models - Stealth Squadron FAC#49

However, he is clearly not impressed with the charger as described above, stating: -

'Warning- the 3 cell AA charger that comes with some pre-wired supercap power systems (either ARF or sold separately) needs a board to limit the voltage to the supercap. It's a real kluge of a system- not recommended.'

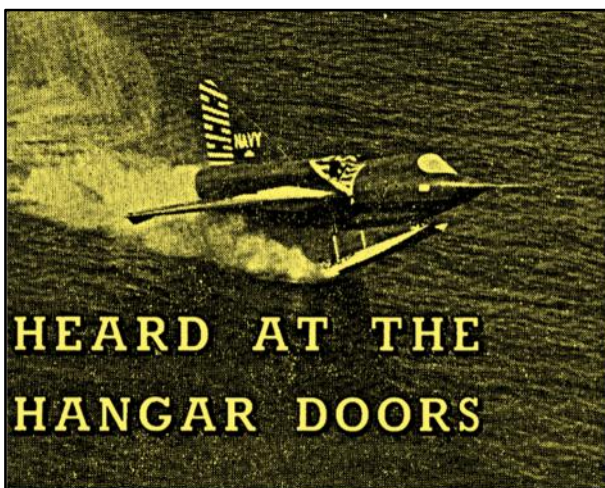
The word 'kluge' was new to me. According to Wikipedia, 'A kludge or kluge is a workaround or makeshift solution that is clumsy, inelegant, inefficient, difficult to extend, and hard to maintain.' Sam recommends using a 'buck/boost power converter' and a suitable supply battery. This, again, is a device new to me, but it enables the maximum supply voltage to be controlled and fixed. They are apparently readily available from online sources.

I have to say that I have found the three cell AA charger convenient, as it is in one piece and is easy to carry in the pocket. I time the charge using the 'one elephant, two elephants.....' or similar method to count the seconds.

Nick Peppiatt



Cartoon courtesy New Zealand Magazine 'PROPWASH'



Sea Dart

In an essentially waterplanes issue, it is only fitting that a somewhat unusual waterplane should head our Hangar Doors columns this month. The Convair XF2Y-1 "Sea Dart" Navy jet fighter is seen making a high speed run on San Diego Bay in California. Now fitted with a single ski as part of the Convair-Navy hydrodynamic research programme, it is powered by twin Westinghouse J-46 engines which permit subsonic speeds in level flight. The aircraft, which has exceeded the speed of sound, should make an interesting subject for a Jetex powered scale model, with the encouraging thought that Jetex units operate equally well under water as they do above the surface!

"M.A.P." Books

Model Aeronautical Press Ltd., besides publishing "AEROMODELLER" and its associate magazine *Model Maker*, has embarked on a gradually expanding book programme. The regular appearance of *Aeromodeller Annual* we know is appreciated for its cosmopolitan appeal, and quality of content, by modellers throughout the world. This year's edition, to be published November 1st, is no exception, containing as it does such excellent features as P. E. Norman on "Ducted Fans", "A/1 Gliders" by Van Hattum, "Radio Control in New Zealand" by Les Wright, "Ultra Light Aircraft" by George Cull, "Combat Flying" by Ron Moulton, and many other first-class articles too numerous to mention here. The cover is C. Rupert Moore's best painting yet, depicting a helicopter over the Thames in front of the Houses of Parliament. Mr. Moore has also prepared a special colour plate within the book which gives accurate helicopter colour schemes for the discerning enthusiast.

Latest book from the M.A.P. press announced on page 509 is "Construction for Aeromodellers". Another "five-bobber", it can briefly be described as a companion title to "Design for Aeromodellers", giving a complete treatise on the constructional side of model aeroplanes. There are eighteen chapters ranging from Tools of the Trade—Simple Fuselages—Advanced Fuselages etc., through to Covering—Rubber Motors and Engine know-how.

For the beginner it is invaluable, and for the expert a most excellent reference book with a useful

516

October, 1955

wrinkle on every page. Publication date was September 1st, 1955, when the second edition of "Simple Radio Control" by Harry Hundleby also appeared. Those modellers contemplating "button-pushing" for a change, who failed to obtain a copy of the first edition, should have no difficulty in finding this useful little book at their local model shop or bookstall.

Look out for . . .

As you read this our Staff Reporters will have just returned from the American Zone in Germany after covering the triple World Championships held during the first week of September. It is our earnest wish that the wonderful weather enjoyed in this remarkable summer of 1955 will have continued over the period of the events, for it is always disheartening—and most inconclusive—for contests of this importance to be influenced one way or the other by abnormal meteorological conditions. If the results are to be affected by weather, we infinitely prefer thermals and hot sun to chilling rain and high winds!

A fully illustrated report will appear in our next issue, published on October 15th, so make sure of your copy now by placing a firm order with your local agent.

Modelling in the R.A.F.

Our illustrated report in this issue on the recent R.A.F. Model Championships clearly demonstrates how firmly the Royal Air Force Model Aircraft Association is established in the eyes of the Service. Now in its sixth year of existence, the association has the full support of high authority in the R.A.F., which appreciates the important part aeromodelling can play in promoting skill, airmindedness, and the sporting instinct in the Flying Service.

Air Marshal Sir Dermot Boyle, K.C.V.O., K.B.E., C.B., A.F.C., the President of the association, paid full tribute to the benefits of the hobby in his welcoming address to the assembled modellers, culled from the various Commands throughout the country. May we humbly suggest that the R.A.F. could well study the American system under which model enthusiasts are selected from overseas as well as Home Stations, and qualifiers flown home to take their place in the ultimate Championships meeting. Here is an incentive to those airmen stationed far away from the hub of activities, yet who retain their great enthusiasm for all things airborne, whether they be full size or models thereof.

Readers will note the striking advertisement in this issue on behalf of R.A.F. aircrew recruitment, which stresses the advantages of Service life for young men from 17½ to 26 years of age. There can be no doubt that the R.A.F. offers a most interesting and lucrative career for aviation enthusiasts in its flying branches, and equally so among its ground trades. Keen aeromodellers with enthusiasm and aptitude for this type of life can continue their civilian hobbies and interests in the comforting knowledge that these are not merely encouraged, but actively promoted within the Service.

1955 Model Engineer Exhibition

We were once again disappointed with the rather meagre support of the Model Aircraft Section at this popular annual exhibition, and even more with the poorly-dressed display of such models as had been collected. Surely a better background than bare brick walls could have been provided, for the standard of aircraft shown was quite high, but much of the potential value of the exhibit was wasted by poor lighting, totally unsuitable background, and the eternal "flat" layout which requires the public to strain over the front row of models to see those hidden away at the back.

The absence of certain well-known top line exhibits was noticeable, for we are continually witnessing outstanding examples of the aeromodeller's art in static displays at various Rallies and Galas, any of which could be among the prize-winners at the "M.E." Surely owners are not content to display their masterpieces to the converted only—a little more window dressing in front of the general public would not come amiss.

Perhaps the greatest disappointment is the continued absence of aeromodelling contenders for the Duke of Edinburgh Trophy. We see no reason why some of the better examples of the aeromodeller's art do not take their place with the loco's, ships, and general engineering exhibits that are so plentiful at the "M.E.". Granted, the bulk of model aircraft are built for functional performance with no thought of exhibitions in mind, but every Rally produces a galaxy of models never intended to take the air, any one of which could rank with those modelling marvels produced on a lathe.

This year's winner of the Duke's Trophy is outstanding inasmuch as it displays a thorough knowledge and skill in more than one branch of the modeller's art. Mr. C. A. Chapman, of Peacehaven, exhibited a small scale Admiral's Barge in a setting rarely witnessed in a show of this nature, for his general display created a picture in three dimensions that was excellent in all details. In our (probably biased) opinion, only a model aircraft from the Evan's stable could have competed on equal terms with Mr. Chapman, but we are unshaken in our view that it is high time aeromodelling exhibits took their rightful place with the other examples of modelling in this widely publicised annual show.

Mrs. Rip

Modellers everywhere will join us in tendering sincere sympathies to Mr. C. A. (Rip) Rippon on the loss of his wife, who passed away on the 22nd. August, 1955. To most of us, the "Rips" seemed to have been going as long as aeromodelling itself, and Mrs. Rippon will be sadly missed at those functions where her kindly and motherly presence made itself felt.

Our last recollection of her was the 1954 Northern Heights dinner, when these founder members were presented with a handsome volume of photographs, recalling many of their earlier activities in the Club, and particularly those connected with the famous N.H. Gala, which the Rippsons' did so much to popularise.

There are probably few ladies connected with the aeromodelling movement so widely known as Mrs. "Rip", for apart from her activities in a hard working capacity at the various Galas, she met a wide circle of hobbyists at the well-known pre-war establishment of Premier Aeromodel Supplies, where the Rippsons presided as a committee of two welcoming modellers for visitors from all over the country. There are far too few of her calibre today, and her cheerful presence will be sorely missed.

Golden Wings Finalists

The response to our special Junior contest, as announced in the July, 1955, issue, exceeded all expectations, and the flight entry forms came in at such a rate that we were hard put to it to cope! The enthusiastic reception of our junior stimulus has been most encouraging, and clearly demonstrates that there is a huge potential to the aeromodelling movement, if only those in charge of clubs will open their eyes to the fact.

The constant cry of "lack of members" surely indicates a want of drive and/or publicity on the part of established clubs. We have been particularly aware of the number of requests for information regarding local flying groups, and it is obvious that in a number of cases even the local model shop proprietor is not aware of clubs operating in his area. It is up to clubs to bring their existence to the notice of the public by means of articles or notices in local newspapers, and in particular the provision of suitable literature and notices in the local shop where new members can expect to be recruited. To those clubs who have informed would-be members that "they don't cater for juniors" we would only say, get genned up and form a junior section right away, for a youngster set on the right road now is tomorrow's first-rate senior. Lack of foresight seems to be an occupational hazard in some model clubs!

The lucky finalists who competed for the valuable list of prizes at R.A.F. Halton on September 10th-11th are as follows, and a full report will appear in our November issue, on sale October 15th, 1955.

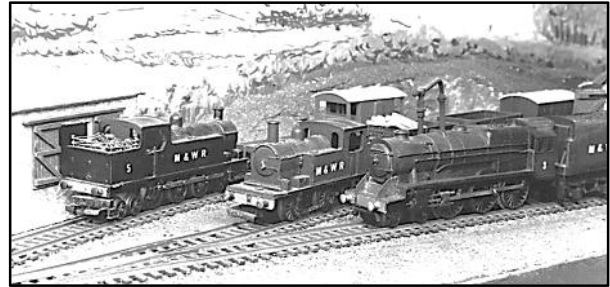
District	Name	Age	Town	Total
A.T.C.	G. A. Rosson	15y.10m.	Sandbach, Ches.	12m. 21s.
1	A. Black	15y. 7m.	Lanark, Scotland	7m. 10s.
2	J. Cooke	15y. 9m.	Spennymoor, Durham	7m. 30s.
3	I. A. Ramsay	14y. 2m.	Sheffield, Yorks	5m. 53s.
4	D. R. Reed	14y. 4m.	Cheadle, Ches.	7m. 15s.
5	M. D. Simmons	15y. 2m.	Newport, Salop	15m. 10s.
6	J. Fellows	15y. 0m.	West Bromwich, Staffs	9m. 23s.
7	P. Ball	12y.10m.	Croft, Leics	9m. 40s.
8	T. K. Donovan	15y.10m.	Lambeth, London	14m. 02s.
9	M. Newman	10y. 6m.	Kingston, Surrey	7m. 45s.
10	R. A. Gatehouse	15y.11m.	Mere, Wilts	9m. 57s.

In addition we have selected the youngest competitor, John Shember of Oxford, who is only 8 years 11 months old, and whose total time was 4m. 19s.

We congratulate this round dozen of enthusiastic youngsters for their stout efforts in the contest. Some idea of the performance attained with the standard "Golden Wings" A/I glider design is reflected in the durations quoted above. Those who failed to qualify can be justly proud of their own efforts achieved against keen competition from the length and breadth of the British Isles.

Our secretary Ray, with his piece on jam making, suggested that we write about any hobbies other than aeromodelling that we might have. Our Chairman Tony responded with an article on his superb garden Railway and Ray himself wrote of his modelling life to date.

I thought I'd better do my bit. I do not have any alternative hobby, I started aeromodelling at school and, apart from a short excursion into model railways, I'm an aeromodeller.



However I am/was a sportsman: archery; cricket; rugby; golf; motor cycle trials; cycle time trials; fishing; rifle shooting; pistol shooting; and finally a magazine editor (probably a hobby).

Archery: Age 13, I was a founder member of Rugby Archery Club. I was recruited whilst doing a gymnastic display at a local garden fate. We shot longbows in a local park, we made our own target bosses by winding straw and securing with string. The park was about $\frac{1}{4}$ mile from our storeroom and we humped our kit by hand. This pass-time lasted until I started my apprenticeship when cricket took over.

Cricket: I played club cricket until I was in my thirties. Our works team was one of the two best teams in the area. I worked my way up, as a bowler, through the 2nd.XI into the 1st.XI. At one period I was playing four times a week, twice in our works leagues then the main Saturday team followed by the Sunday team. My best performance was 6 wickets for 0 runs, it was a pig of a pitch. Our other opening bowler, an Australian, was bouncing balls up round the ears of the oppositions batsmen, whilst I knocked over their stumps from the other end. We travelled to matches first by coach, then by individual transport. My father travelled with me to most matches and after he died one closed season I did not play again as golf had taken my interest.

Rugby: Whilst doing my National Service I was posted to The Hong Kong Signal Regiment and when it was known I was from Rugby I was automatically volunteered for the regimental rugby team. The only thing of distinction was playing for the regiment in the Hong Kong Sevens.

Golf: I joined Rugby Golf Club, a private club, and played a lot of golf, I was soon down to a single figure handicap and retained it for most of my golfing career. I was never down to scratch, 7 handicap was my lowest. I managed to win a trophy or two but nothing significant. I played a major part in the club organization serving at times as club secretary, Captain and President. I am still a long service member but I think if I swung a golf club now I'd fall over.

Motor-cycle Trials: A work mate got me interested in the sport around the late 1950's and I continued until around 1965 or so. I was not particularly good as my sense of balance was less than desired. I had always been a motorcyclist and thoroughly enjoyed myself mud-plugging as the sport was nicknamed. When I got home after an event I hosed the bike down then the wife hosed me down. I've got a couple of small trophies for something or other but once again nothing significant. I performed best in bad conditions as I was strong enough to virtually carry the bike through the hard sections.

Cycle time trials: Once again it was a workmate who introduced me to cycle time trials. I joined Coventry Cycling Club and rode with them for quite a few years. I competed in time trials, 10 miles, 25 miles, 50 miles and 100 miles, once again only one or two minor trophies, I was too short in the upper leg to be really good. Put in perspective, I only failed once to beat

5 hours for a 100 mile event and that was due to two punctures. That's 20 miles per hour for the 100 miles. In training I aimed for 1,000 miles a month.

Fishing: There was a fishing club where I worked and I was soon into match fishing, I won the first match with the club out on the drains somewhere. We travelled by coach to the venues in the early hours of the morning, I was picked up in Lutterworth at about 5am. Don't really know where we went, I was half asleep most of the journey. We fished for 5 hours then back home. Our club managed to win the Bedworth Winter League 3 times on the trot.

Rifle Shooting: I started rifle shooting whilst doing National Service in the Royal Corps of Signals out in Hong Kong. There was a request for volunteers for the regimental rifle team and anything for a skive Andrews was soon competing in the Far East Rifle League with no particular distinction. It was a day off for me, we withdrew rifles and ammunition from the armory after morning parade, Took the ferry to the mainland and walked to the army outdoor rifle range where we shot our practice or match targets, then found somewhere for a leisurely lunch, then back to barracks via the ferry in time for tea. After demob, the drawing office I went back to, had a rifle team in the works interdepartmental rifle league and yours truly added another string to his bow. It turned out I was a good shot. I picked up prizes at many open meetings, shot annually at the week-long NSRA small-bore championships at Bisley, shooting in the county team on more than one occasion. I still have my rifle but if I lay down to shoot now I'd never get up again unaided.



Pistol Shooting: My club also shot pistols and it so happened I was even better with a pistol, I was club champion on numerous occasions and I won the County Championship in 1980.

Editor of The New Clarion: It is now my only hobby/pass-time, it keeps me amused and exercises the old brain box.

Jack of all trades, master of none



John Andrews



Engine Tests

No. 78. The Sabre 35

THE Sabre 35 engine, which is built by Gordon Burford and Company of Grange, South Australia, may justly claim to be the best engine of its type produced in the British Empire. Admittedly, the 0.35 cu. in. class glowplug engine has no equivalent among domestic productions, but even if it had, we feel that the Sabre would still rank among the leaders. Gordon Burford has been producing engines for many years, first under the name of "Geo-Bee" and later as the "Sabre" series and he is undoubtedly the No. 1 manufacturer in the British Commonwealth, outside the United Kingdom. The present report is, in fact, the fourth "Engine

Test" article to deal with a Sabre engine.

The Sabre 35 is a glowplug engine designed primarily for stunt and combat work and, as its name suggests, is of 0.35 cu. in. capacity. In all these respects it is essentially "American" in conception. This is carried a stage further in the design and construction of the unit which is in accordance with established and well-proven U.S. practice.

Thus, we find that the engine has a bore and stroke of 0.800 in. by 0.700 in., precisely the same measurements as those of the American Fox 35, an engine which, for a number of years has enjoyed the distinction of being the best all-round American stunt model engine and has had innumerable contest wins to its credit.

Structural design, however, follows fairly closely that of the more recently introduced K. & B. Torpedo 35 model. Here, in the Sabre, we find the same type of cylinder design with integral cooling fins and extremely large ports, while the general external appearance is very similar to this American engine. The same method of cylinder attachment, employing only two screws threaded into the crankcase casting, is also featured. Here, we may add, for the benefit of anyone entertaining doubts about the efficiency of this design detail, that there

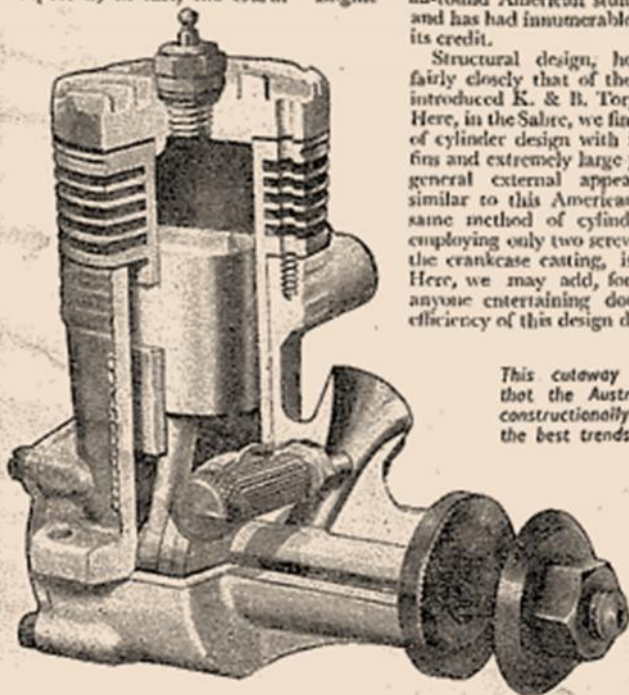
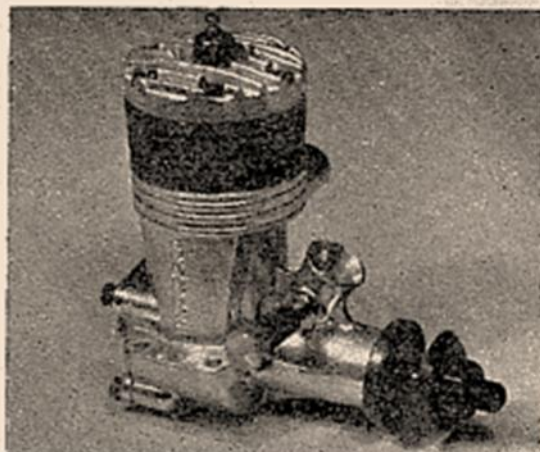
is little risk of distortion and leakage for three reasons.

Firstly, the bottom flange of the cylinder, which is a full $\frac{1}{8}$ in. thick, is also stiffened by a thickening of the cylinder wall between this and the first cooling fin. Secondly, the lower section of the cylinder is closely fitted in the upper portion of the crankcase and the two flange faces are accurately aligned. Thirdly, the two screws pass through from the cylinder head, which is an extremely rigid alloy casting, attached with four screws to the cylinder, and an evenly distributed pressure is thus transmitted down the cylinder walls to the flange faces, provided the two screws are tightened equally.

Some concern may be felt in regard to the considerable loads imposed upon these two screws, in resisting combustion chamber pressures, and to this we can only reply that the method has proved adequate, in this respect, in at least two other engines of similar design and performance and that the risk of thread damage has been reduced, in the Sabre, by making the screws enter the casting to a depth of nearly $\frac{1}{2}$ in.

Structurally, the Sabre 35 embodies two features which should not go unmentioned. Firstly, all the production engines have a large main bearing clearance, which is quite intentionally made so, in accordance with test findings by the maker, and purchasers should not, therefore, suppose that this is a "fault." Secondly, the cylinders, unlike some other engines of similar type, are hardened, ground and lapped for increased bore life—an important consideration in parts of Australia and other places where dusty conditions predominate.

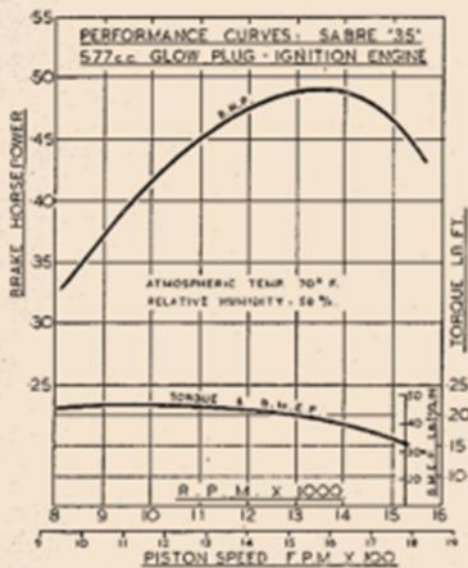
The Sabre 35 is of pleasing appearance and the diecastings, which are of high silicon content aluminium alloy, are exceedingly cleanly produced. They are set off by smoothly machined steel cylinder fins which are blued against corrosion.



This cutaway drawing shows that the Australian Sabre 35 constructionally closely follows the best trends in U.S. design.

OCTOBER 1955

MODEL AIRCRAFT



Specification

Type: Single cylinder, air-cooled, two-stroke cycle, glowplug ignition. Shaft type rotary valve induction. No sub-piston supplementary air induction. Lapped piston with straight baffle. Cross-scavenged two-port cylinder.

Swept Volume: 5.767 c.c. (0.3519 cu. in.).

Bore: 0.800 in. Stroke: 0.700 in.

Stroke/Bore Ratio: 0.875 : 1.

Compression Ratio: Not disclosed.

Weight: 7.4 oz.

General Structural Data

Crankcase diecast in 12 per cent. silicon aluminium alloy with integral main bearing housing and carburettor intake. Extra strong beam mounting lugs. Detachable rear crankcase cover of silicon aluminium alloy, secured with four screws. Crankshaft of 3 per cent. nickel steel, hardened and tempered and blued against corrosion and running in steel bushing. Hardened, ground and lapped cylinder with integral cooling fins. Mechanite piston with solid gudgeon pin. Diecast 12 per cent. silicon aluminium alloy finned cylinder head attached with six screws, two passing through cylinder fins to secure assembly to crankcase. Impregnated asbestos cylinder-to-head and cylinder-to-crankcase gaskets. Steel propeller drive plate keyed on to flat on crankshaft, with heavy steel washer and nut, all blued. Brass spraybar type needle-valve with ratchet.

Test Engine Data

Running time prior to test: 2 hours.

Fuels used: (a) Running in: 70 per cent. power blending methanol, 30 per cent. castor oil B.P. (b) Dynamometer test: 55 per cent. blending methanol, 20 per cent. nitro-methane, 25 per cent. castor oil B.P.

Ignition equipment used: Maker's long-reach glowplug. 1.7 volts to start.

Performance

The Sabre 35 is not at all fussy and starts very easily. For an initial start from cold, we primed fairly generously through the exhaust after choking to draw the fuel up to the jet. When hot, the engine will restart, irrespective of prop size, after a single choked flick, on the running setting. Initial running-in was carried out with the engine "four-stroking," i.e. running on a rich needle setting at reduced r.p.m. Due to the large main bearing clearance, the benefits of running in are mainly confined to the piston and cylinder surfaces. Indications were that an unduly lengthy running-in period was not necessary.

The recommended fuel blend given in the maker's leaflet is a plain two-part mixture of methanol and castor oil and the engine behaves very well on this economical fuel. However, in order to give a fairer basis for comparison with American engines of a similar type (which are invariably rated for performance on the nitroparaffin content racing fuels readily available in the U.S.A.), a 20 per cent. nitromethane content fuel was used for our dynamometer test.

Under these conditions, a maximum torque of 0.22 lb./ft. was recorded at a little over 9,000 r.p.m., equivalent to a

b.m.e.p. of approximately 47 lb./sq. in. Torque declines steadily above 10,000 r.p.m. and results in the maximum output being realised at between 13,000 and 14,000 r.p.m., the actual peak appearing at about 13,700 r.p.m. where the output registered was 0.49 b.h.p.

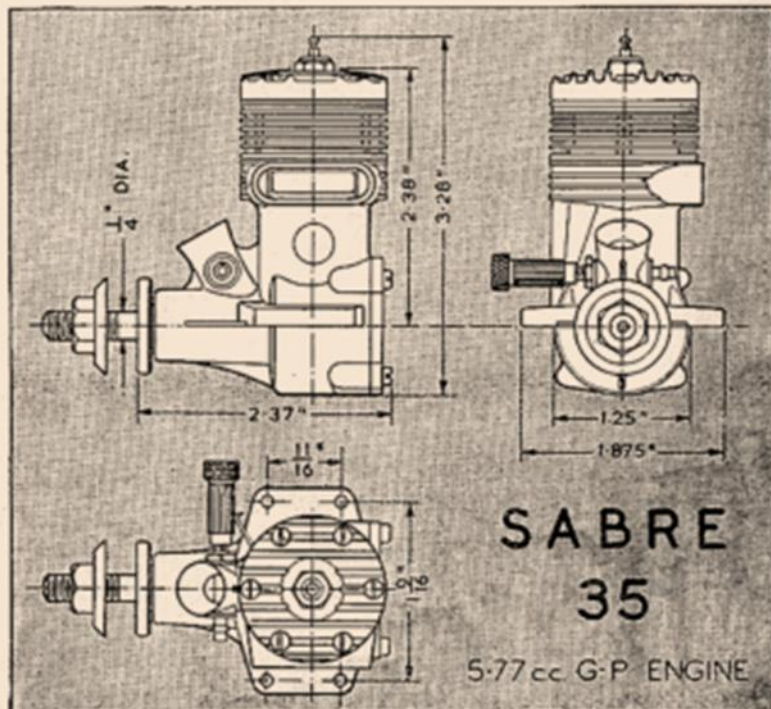
This, of course, is a very useful performance and, while no greater than one might reasonably expect of a modern 0.35, from which an output of around ½ h.p. is usual, is particularly noteworthy on the basis of power/weight ratio, as the Sabre exceeds 1 b.h.p./lb.

Two minor faults came to light during our tests. The first concerned the glowplug supplied. Half-way through the tests it was found that the coils of the filament had become displaced and bunched together within the filament cavity, presumably due to softening of the filament wire. This may, perhaps, be attributed to the somewhat more severe operating conditions of our bench tests and may not occur under actual flight conditions.

The second bother concerned the steel drive plate. This is keyed to the shaft by means of a flat on the latter and, should the engine backfire (a contingency which cannot, of course, be completely guarded against), the drive plate hole becomes enlarged, so that a backlash will develop. Fortunately, the shaft is hard enough to resist damage, so that the only component likely to require replacement is the drive plate itself.

Power/weight ratio (as tested): 1.06 b.h.p./lb.

Specific output (as tested): 85 b.h.p./litre.



FF Nationals Results

Roger Newman

2025 Free Flight Nationals
Open Classes

Combined glider	Name	BMFA No	Club	1	2	3	Total	Fly off	Points			
1	Colin Foster	17203	Morley	180	180	180	540	386	9			
2	Stuart Drmon	67790	Birmingham	180	180	180	540	297	6			
3	John Carter	50520	Grantham	180	180	164	524		4			
4	Gary Mdelin	41080	Country Member	180	148	180	508		3			
5	Simon Dixon	75247	Birmingham	180	103	180	463		2			
6	Chris Parry	62525	Biggles	133	166	160	459		1			
7	Mike Chapman	88776	Grantham	180	130	146	456					
8	Richard Jack	56873	Birmingham	180	180	78	438					
9	John Williams	63375	Birmingham	180	180	0	360					
10	Gary Peck	53736	Morley	143	146	0	289					
11	Dave Cox	73114	Crookham	137	91	0	228					
Combined rubber	Name	BMFA No	Club	1	2	3	Total	Fly off	Points			
1	Phil Ball	57180	Grantham	180	180	180	540	506	9			
2	John Carter	50520	Grantham	180	180	180	540	409	6			
3	Wayne Butler	80768	Crookham	180	180	180	540	288	4			
4	Stuart Darmon	67790	Birmingham	180	180	180	540	234	3			
5	Mark Bennis	72513	Peterbrough	180	180	180	540	183	2			
6	Simon Richardson	135810	Oxford	180	180	180	540	106	1			
7	Pete Woodhouse	00679	Morley	180	180	180	540	0				
8	Andrew Moorhouse	62373	Vikings	180	180	178	538					
9	John Watson	70712	Peterborough	180	107	142	429					
10	Derek May	56714	Delyn	118	0	0	118					
Combined power	Name	BMFA No	Club	1	2	3	Total	Fly off	Points			
1	Alan Jack	56873	Birmingham	180	180	180	540	648	9			
2	Paul Chapman	41309	Vikings	180	180	180	540	478	6			
3	Steve Barnes	51987	Morley	180	180	180	540	460	4			
4	Dave Cox	73114	Crookham	180	180	180	540	347	3			
5	Ken Faux	52579	Vikings	180	149	180	509		2			
6=	Nick Botham	122255	Morley	180	180	123	483		0.5			
6=	Bob Garner	55805	Birmingham	180	180	123	483		0.5			
8	Peter Martin	75247	Country Member	103	180	0	283					
Combined electric	Name	BMFA No	Club	1	2	3	Total	Fly off	Points			
1	Chris Redrup	34457	Crookham	180	180	180	540	383	9			
2	Pete Watson	62397	Birmingham	180	180	180	540	358	6			
3	Trevor Grey	33882	Crookham	180	180	180	540	268	4			
4	John Cooper	3422	Biggles	180	180	180	540	255	3			
5	Colin Foster	17203	Morley	180	180	180	540	0	2			
6	Mark Bennis	72513	Peterbrough	171	180	180	531		1			
7	Nick Botham	122255	Morley	105	180	180	465					
8	Dave Ginns	84235	Birmingham	112	180	125	417					
9	Peter Gibbons	76597	Peterborough	104	135	162	401					
Classic rubber/power	Name	BMFA No	Club	1	2	3	Total	Fly off				
1	Phil Ball	57180	Grantham	180	180	180	540	455				
2	Chris Redrup	34457	Crookham	180	180	180	540	333				
3	Simon Dixon	75247	Birmingham	180	180	180	540	262				
4	Steve Barnes	51987	Morley	180	180	180	540	94				
5	Pete Woodhouse	00679	Morley	180	180	165	525					
6	Stuart Darmon	67790	Birmingham	180	137	0	317					
7	Peter Watt	10895	Mid Ards	180	0	0	180					
8	Bob Garner	55805	Birmingham	142	0	0	142					
Women's Cup	Name	BMFA No	Club	1	2	3	Total	Fly off				
1	Sue Johnson	212096	Market Harborough	99	180	98	377					
CLG	Name	BMFA No	Club	1	2	3	4	5	6	7	Total	Fly off
1	Bill Colledge	65004	Birmingham	60	60	60	60	60	53	44	397	
2	Dylan Roberts	21245	Country Member	27	18	60	60	60	60	57	342	
3	Steve Brewer	77965	Biggles	41	60	60	50	60	52	16	339	
4	Phil Ball	51780	Grantham	60	58	40	60	47	10	8	283	
5	Nick Botham	122255	Morley	24	28	32	24	39	45	30	222	
Frog Junior	Name	BMFA No	Club	1	2	3	Total	Fly off				
1							0					
Tailless	Name	BMFA No	Club	1	2	3	Total	Fly off				
1	Spencer Willis	344982	Croydon	180	180	180	540					
2	Stephen Fielding	67400	Morley	180	180	136	496					
Vintage glider	Name	BMFA No	Club	1	2	3	Total	Fly off				
1	Colin Foster	17203	Morley	180	180	180	540	194				
2	Roger Heap	73338	Biggles	180	180	180	540	153				
3	Paul McManon	46824	Peterborough	113	160	79	352					

**2025 Free Flight Nationals
FAI & Open Classes**

FIA	Name	BMFA No	Club	1	2	3	4	5	Total	Fly off	Points
1	Richard Jack	108315	Birmingham	180	119	180	180	180	839		4
2	John Carter	50520	Grantham	180	156	180	103	180	799		3
3	John Williams	63375	Birmingham	180	146	72	0	0	398		2
4	Stuart Darmon	67790	Birmngham	130	180	0	0	0	310		1

F1B	Name	BMFA No	Club	1	2	3	4	5	Total	Fly off	Points
1	John Carter	50520	Grantham	180	180	180	180	180	900	208	9
2	Mike Woolner	57957	Country Member	180	180	180	180	180	900	0	6
3	Mike Woodhouse	34262	Vikings	180	180	180	180	163	883		4
4	PeterMartin	45729	Country Member	180	180	134	0	0	494		3
5	Mark Benns	72513	Peterborough	180	114	0	0	0	294		2
6	John Whitby	86913	Grantham	180	0	0	0	0	180		1

F1C	Name	BMFA No	Club	1	2	3	4	5	Total	Fly off	Points
1	Ken Faux	52579	Vikings	180	180	180	180	180	900	430	3
2	Alan Jack	56873	Birmingham	180	180	180	180	180	900	386	2
3	Simon Dixon	75247	Birmingham	180	170	180	180	180	890		1

F1Q	Name	BMFA No	Club	1	2	3	4	5	Total	Fly off	Points
1	Chris Redrup	34457	Crookham	180	180	180	180	180	900	291	9
2	Pete Watson	62397	Birmigham	180	180	180	180	180	900	284	6
3	Mark Benns	72513	Peterborough	180	180	180	180	174	894		4
4	Trevor Grey	33827	Crookham	180	180	148	180	180	868		3
5	Dave Ginns	84235	Birmingham	142	120	180	180	180	802		2
6	Pete Gibbons	76597	Peterborough	102	95	132	110	85	524		1

Vintage rubber/power	Name	BMFA No	Club	1	2	3	Total	Fly off
1	Russell Peers	27418	Grantham	180	180	180	540	340
2=	Colin Foster	17203	Morley	180	180	180	540	0
2=	Peter Woodhouse	00679	Morley	180	180	180	540	0
2=	P Ball	57180	Grantham	180	180	180	540	0
5	Nick Botham	122235	Morley	180	105	104	389	
6	Dave Cox	73114	Crookham	180	140	0	320	
7	Gordon Wrburton	58428	Morley	137	180	0	317	

SLOP	Name	BMFA No	Club	1	2	3	Total	Fly off	Points
1	Steve Branes	51987	Morley	180	180	151	511		4
2	Bob Garner	55805	Birmingham	180	106	110	396		3
3=	P Ball	57180	Grantham	180	0	0	180		1.5
3=	Dave Cox	73114	Crookham	180	0	0	180		1.5

Classic glider	Name	BMFA No	Club	1	2	3	Total	Fly off	Points
1	Kris Best	23458	Birmingham	180	180	130	490		9
2	Colin Foster	17203	Morley	180	180	120	480		6
3	Chris Parry	62525	Biggles	180	87	180	447		4
4	Nick Botham	122235	Morley	165	120	122	407		3
5	Roger Heap	73338	Biggles	24	180	180	384		2
6	Mike Edwards	172346	Nottingham	101	180	91	372		1
7	P Arkley	74270	Nottingham	81	180	106	367		
8	Mike Chapman	88776	Grantham	92	180	83	355		
9	Simon Dixon	75247	Birmingham	180	78	57	315		
10	Paul McMahon	45824	Peterborough	180	0	0	180		

**2025 Free Flight Nationals
Mini Classes**

FIH	Name	BMFA No	Club	1	2	3	4	5	Total	Fly off	Points	
	Roger Heap	73338	Biggles	120	120	120	71	120	551		9	
	Richard Jack	108316	Birmingham	92	120	120	64	120	516		6	
	Gary Madelin	41080	Country Member	112	120	105	120	27	484		4	
	Mike Edwardfs	172346	Nottingham	79	120	57	120	75	451		3	
	Gil Hart	154609	Vikings	120	120	0	0	0	240		2	
	Paul Arkley	74270	Nottingham	120	0	0	0	0	120		1	
FIG	Name	BMFA No	Club	1	2	3	4	5	Total	Fly off	Points	
	Pete Woodhouse	00679	Morley	120	120	120	120	93	573		6	
	Phil Ball	57180	Grantham	97	120	120	120	97	554		4	
	Gavin Mannion	33505	Birmingham	120	120	0	0	0	240		3	
	Simon Richardson	135810	Oxford	120	4	0	0	0	124		2	
	Mark Benns	72513	Peterborough	66	0	0	0	0	66		1	
FIJ	Name	BMFA No	Club	1	2	3	4	5	Total	Fly off	Points	
	Neil Allen	39572	East Grinstead	120	120	120	120	120	600		4	
	Simon Dixon	75247	Birmingham	120	79	120	97	120	536		3	
	Alan Jack	56873	Birmingham	105	104	120	36	0	365		2	
	Ken Faux	52579	Vikings	120	0	0	0	0	120		1	
BMFA 1/2A power	Name	BMFA No	Club	1	2	3			Total	Fly off		
	PeterMartin	45729	Country Member	120	120	120			360			
	Bob Garner	55805	Birmingham	120	120	72			312			
	Mike Chapman	88776	Grantham	95	120	56			271			
E36	Name	BMFA No	Club	1	2	3			Total	Fly off	Points	
	Pete Watson	62397	Birmingham	120	120	120			360		9	
	John Cooper	3422	Biggles	120	105	120			345		6	
	Chris Redrup	34457	Crookham	120	120	87			327		4	
	Colin Fostaer	17203	Morley	120	81	120			321		3	
	Khris Best	23458	Birmingham	99	89	113			301		2	
	Mike Cook	66798	Birmingham	120	120	56			296		1	
	Nick Bothan	122255	Morley	90	79	120			289			
	Sue Johnson	212996	Market Harborough	120	72	43			235			
	Dave Ginns	84235	Birmingham	90	120	0			210			
P30	Name	BMFA No	Club	1	2	3			Total	Fly off	Points	
	Simon Richardson	135810	Oxford	120	120	120			360		9	
	Chris Redtup	34457	Crookham	62	120	117			299		6	
	Brian Lavis	72364	Biggles	95	68	120			283		4	
	Mick Page	01364	Peterborough	107	120	0			227		3	
	Stephen Feiding	67400	Morley	116	101	4			221		2	
	Gary Law	88342	Oxford	48	69	0			117		1	
	Derek May	56714	Delyn	58	0	0			58			
	Chris Grant	66373	Peterborough	48	0	0			48			
E30	Name	BMFA No	Club	1	2	3			Total	Fly off	Points	
	Nick Botham	122255	Morley	120	120	120			360	347	4	
	Trevor Grey	33827	Crookham	120	120	120			360	321	3	
	Peter Gibbons	76597	Peterborough	120	120	74			314		2	
	Colin Foster	12203	Morley	112	0	0			112		1	
Mini Vintage	Name	BMFA No	Club	1	2	3			Total	Fly off		
	Phil Ball	57180	Grantham	120	120	120			360	38		
	Colin Foster	17203	Morley	120	120	120			360	0		
	Nick Botham	122255	Morley	120	66	110			296			
	David Ryals	177259	Morley	120	0	0			120			
	Paul McMahon	46824	Peterborough	120	0	0			120			
	Peter Watt	108095	Mid Aras	100	0	0			100			
	Ken Bates	51145	Clee Mac	28	0	0			28			
CO2	Name	BMFA No	Club	1	2	3			Total	Fly off		
	Steve Philpott	64218	Birmingham	120	0	0			120			
HLG	Name	BMFA No	Club	1	2	3	4	5	6	7	Total	Fly off
	Mark Benns	725213	Peterborough	28	29	36	46	51	17	60	267	
	Steve Brewer	77965	Biggles	60	22	12	0	0	0	0	94	

**2025 Free Flight Nationals
Championships**

Glider	Name	BMFA No	Club	Combined	FAI	Mini FAI	Classic Glider	Total	Tie Break
1	Colin Foster	17203	Morley	9				6	15
2	Roger Heap	73339	Biggles				9	2	11
3	Richard Jack	108315	Birmingham		4		6		10
4	Kris Best	23458	Birmingham					9	9
5	Stuart Drmon	67790	Birmingham	6	1				7
6	John Carter	50520	Grantham	4	3				7
7	Gary Madelin	41080	Country Member	3			4		7
8	Chris Parry	62525	Biggles	1				4	5
9	Mike Edwards	172346	Nottingham				3	1	4
10	Nick Botham	122255	Morley					3	3
11	Simon Dixon	75247	Birmingham	2					2
12	John Williams	63375	Birmingham		2				2
13	Gil Hart	154609	Vikings				2		2
14	Paul Arkley	74270	Nottingham				1		1

Rubber	Name	BMFA No	Club	Combined	FAI	Mini FAI	P30	Total	Tie Break
1	John Carter	50520	Grantham	6	9				15
2	Phil Ball	57180	Grantham	9			4		13
3	Simon Richardson	135810	Oxford	1			2	9	12
4	Pete Woodhouse	00679	Morley				6		6
5	Mike Woolner	57957	Country Member		6				6
6	Chris Redrup	34457	Crookham					6	6
7	Mark Benns	72513	Peterbrough	2	2		1		5
8	Wayne Butler	80768	Crookham	4					4
9	Mike Woodhouse	34262	Vikings		4				4
10	Brian Lavis	72364	Biggles					4	4
11	Stuart Darmon	67790	Birmingham	3					3
12	Peter Martin	45729	Country Member		3				3
13	Gavin Mannion	33505	Birmingham				3		3
14	Mick Page	01364	Peterborough					3	3
15	Stephen Feiding	67400	Morley					2	2
16	John Whitby	86913	Grantham		1				1
17	Gary Law	88342	Oxford					1	1

Power	Name	BMFA No	Club	Combined	FAI	Mini FAI	SLOP	Total	Tie Break
1	Alan Jack	56873	Birmingham	9	2		2		13
2	Steve Barnes	51987	Morley	4				3	7
3	Paul Chapman	41309	Vikings	6					6
4	Ken Faux	52579	Vikings	2	3		1		6
5	Dave Cox	73114	Crookham	3				1.5	4.5
6	Bob Garner	55805	Birmingham	0.5				4	4.5
7	Simon Dixon	75247	Birmingham		1		3		4
8	Neil Allen	39572	East Grinstead				4		4.0
9	Phil Ball	57180	Grantham					1.5	1.5
10	Nick Botham	122255	Morley	0.5					0.5

Electric	Name	BMFA No	Club	Combined	FAI	E36	E30	Total	Tie Break
1	Chris Redrup	34457	Crookham	9	9		4		22
2	Pete Watson	62397	Birmingham	6	6		9		21
3	Trevor Grey	33882	Crookham	4	3			3	10
4	Colin Foster	17203	Morley	2			3	1	6
5	John Cooper	3422	Biggles				6		6
6	Mark Benns	72513	Peterbrough	1	4				5
7	Nick Botham	122255	Morley					4	4
8	John Cooper	3422	Biggles	3					3
9	Peter Gibbons	76597	Peterborough		1			2	3
10	Dave Ginns	84235	Birmingham		2				2

I must reply to the "new" competition for vintage HLG/CLG proposed by Gavin Manion. He quotes "please bear in mind that it's new & never flown before in the UK...."

Oh dear!! Gavin, where have you been? Vintage Chuck Glider comps predate SAM 1066.

The first one that I recall was run by Lionel Cowell at the SAM 35 annual "jamboree" at Old Warden in 1984, with 10 entries. The following year we all turned up again, but there was no Lionel Cowell, hence no comp. In 1986, Mike Kemp talked me into running the event, where we had 14 entries - the "highlight" being Mick Pages flight of 19m 22 secs o.o.s. - he never forgave me for setting the max at 1 minute! 1987 saw 15 entries at O.W. & I included a comp at Cocklebarrow Farm - Mike Kems Octoberfest meeting, where we had 12 entries.

1989 was a special year at O.W. because following a suggestion in the SAM 35 yearbook No 5, Spencer Willis mass produced 15 "Vest Pocket Soarers" - given away free for a junior comp. When the announcement was made, about 40 kids turned up! I made the rules very simple - fly all day and just submit your top two times.

1990, Spencer produced 32 more "Vest Pocket Soarers" & received a standing ovation at the prize giving. 1991, 20 more models from Spencer and the junior comp this time included two girls. The winner, 14 year old Greg Foulsham, repeated his win from the previous year. I often wonder if any of those youngsters ever made it to the adult aeromodelling world.

At this event, David Beales produced a trophy for vintage HLGs - the Mike Laxton Memorial Trophy. Mike, a great supporter of vintage HLG comps, was better known for reviving the old wartime Flight Cup comps - rubber powered designs with only one ounce of rubber. The trophy was a polished wood profile of an aeroplane with a brass plate for engraving the winners name. The first winner was Ken Bates.

In 1992 I switched the trophy to Cocklebarrow Farm as entries were higher there than at O.W. It was competed there until 1999 and then switched to RAF Odiham, where Mike Kemp had obtained permission to run SAM events. When the BMFA combined HLG & CLG events, I did likewise and I have records showing it was competed for right up to 2015 or 2016. In all, 10 different people won the trophy, Peter Tolhurst being the most successful, winning it 6 times.

The most successful models were:

"B" Poly,
Heave Ho,
Dingbat,

and the diminutive Vartainian (only 12" span).

The other extreme was "The Monster" - a 30" span built up wing

by Ray Accord, the only Vintage HLG I have seen with D/T. It took some chucking.

Vintage HLG comps were also run at Charlie Newman's Dreaming Spires galas at Port Meadow
and by the Bournemouth Club at M.W.

But never included in David Bakers 3 day Big Bash events.

Strangely I don't recall any being held north of O.W.

Gavin mentions the Zaic Year Books as a good source of plans - so to are the SAM 35 monthly mags & year books.

Good luck Gavin.

Geoff Smith

Introduction

Accent on Outdoors

THE EXCEPTIONAL summer will make 1955 a year to be remembered joyfully by aeromodellers everywhere who made the most of their opportunities to fly in ideal conditions as never before. Many a club and area were able to stage meetings and rallies which raised revenue enough to bring smiles to the faces of treasurers, and enthused secretaries into ambitious winter activities. Culmination of this great season was undoubtedly the World Championships at Mainz-Finthen, with the USAFE base at Wiesbaden responsible for housing and feeding contestants, which had all the makings of a Model Olympics when some three hundred and fifty persons sat down to the post contest banquet. Attendance proved a record with seventy or more participants in Wakefield, Nordic A/2 and Power events.

Final scores tell their own story—with a seven-fold tie in the Wakefield flown off amid great excitement in the fading light: a tie again in the Power event and only the Glider contest going outright to Lindner of Germany, repeating his victory of 1954. Great Britain showed prominently with Michael Gaster a worthy Power winner and the British team in first place. Robert Gilroy only failed by six seconds to take the A/2 event from the formidable German.

Earlier in the year British entries in the Radio Control contest at Essen Mulheim and the Speed Control Line meeting in Paris by no means disgraced themselves, though in the latter event they were competing against what were virtually “professional” teams entered by some countries.

At home, research and the development of new projects had to take very definite second place to active flying, but there were, nevertheless, significant advances. The introduction of regular helicopter services has encouraged an increased interest in this form of motive power, so that some very curious rotating wing designs made an appearance, and at the same time efforts were devoted to producing more orthodox versions of this type of flight.

Progress in the field of ducted fan propulsion advanced to the stage when leading experimenters could look back on more than a score of models built and flown—so that in all nearly a hundred experimental scale models must have been airborne. Most successful of this type were those produced by P. E. Norman, and we are happy to be able to pass on his findings in this edition of AEROMODELLER ANNUAL.

Equally interesting was the revolt of a group of contest power modellers against the tyranny of the pylon; again we offer an article by their leading protagonist, Jim Waldron, discussing his shoulder wing and similar types. Once again C. Rupert Moore, A.R.C.A., has produced our dust-cover, frontispiece and colour insert, and our blockmakers are to be congratulated on providing such fine reproductions of the originals.

This year there has been so much that was worthwhile to squeeze into the ANNUAL that we have made minor changes in layout to accommodate a little more material. We present our yearly offering with the usual words of thanks to the many who have contributed to its contents, and hope it will please our sternest critics—our readers.

John Andrews – Boxes – Proxy – Absent Friends

Right, I'm back on the keyboard, Christmas is behind me and roll on the new year. I'll wish you all a !Happy New Year! and good flying in 2004.

I've not done much myself, aeromodelling wise, over Xmas and I've got a few splinters in my fingers from scratching my brain box trying to come up with something to write about. All is not lost however, I was reading an old Model Aircraft, from September 1960, in bed (I keep a pile by my bedside) and the following article took my fancy, so I'll pinch it for starters.

**Carrying Cares**

WHEN we aged souls at M.A. started our modelling careers, one could buy a very nice, fold flat, cardboard model carrying box, measuring some 40 x 8 x 8 in., at any model shop for the munificent sum of 5s. While the wealthier enthusiast could show his superiority with a fibre box of similar dimensions which had cost him £1.

The immediate pre, and early post war, period brought forth a rash of beautifully finished wooden boxes fitted with all mod cons, and when these proved a little heavy on the shoulders, one could always fit pram wheels and tow same behind one's bicycle. [Led astray by glowing reports of this form of model transport in the model press, your Editor fitted wheels (unsprung) to a modified mahogany bookcase and sweated his bicycle the 15 miles each way to the flying field—once. Although,

in all fairness, a later trailer which was sprung, and on which several orthodox model boxes could be tied, was successfully used for some time.]

Suddenly someone realised the futility of carrying models weighing ounces, in boxes weighing pounds, and the era of the ½ in. sq. balsa framework, covered in anything from brown paper to leathercloth, box was with us. Then came C/L, and model boxes were out—all one could see arriving at meetings was the ubiquitous bicycle, the rider—except for the parts supplying motive power—being hidden behind his large stunter.

But the post war generation of young modellers were growing up and could afford motor cycles, and although control-liners were still carried lashed to the rider's back, the universal adoption of this branch of modelling was on the way out, the F/F devotees were returning to their earlier love. However, to carry a F/F model on a motor cycle required a box, and to withstand the high speed buffeting of travel it had to be fairly

strong, but lo, industry was keeping up with modellers demands. The fluorescent tube had “caught on” and a “tube” box was the perfect shape—unless you wanted to carry several models.

Motor cycles were also meant to carry two people, and two modellers usually had four models. This led to the revival of the wooden box—in a greatly refined form. A lightweight frame covered with m/m ply was now worn, and perhaps the best known of these was Norman Marcus's which measured 48 x 12 x 12 in. Anyone who followed him along a main road at high speed will never forget this era of model carrying!

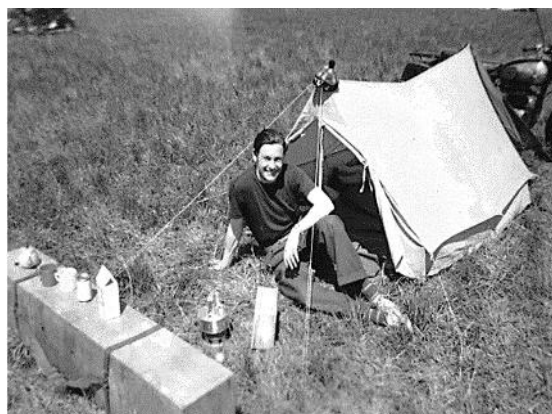
Which brings us to the present day and cars. As everyone knows models fit most easily into a modern car “loose,” although six modellers, plus models, into a four seater won't go—hence roof racks and bigger and better boxes.

What led us to these reminiscences? We almost forgot—it was the two photographs, on the previous page. Taken at the Northern Heights gala, they perhaps show the trend of things to come!

All of this falls into line with my own experiences and probably most of us vintagents. In 1948, or thereabouts, my mate Ian Lomas and I flew our free flight on Lawford aerodrome; about five miles away from Rugby where we lived and bicycles were our transport mode. We flew our control-liners on a local rugby pitch; a short walk away, but the trip to Lawford required a box. I had just started my apprenticeship with the British-Thompson Houston Company and they were an electrical engineering company manufacturing a variety of products. Light bulbs were one and it follows that fluorescent tube boxes were our first model boxes.

A bit of a digression here, I was taken on a tour of the Lamp Works, as part of my apprenticeship and it was my first sight of the devious world of commerce. When we came to the end of the production line, I noticed some bulbs were stamped 'MAZDA' and some were stamped 'OSRAM'. In answer to my naive query, I was informed that BTH made the 100watt bulbs for both companies and other companies made the different wattages. A real eye-opener.

Back to boxes, after the fluorescent tube boxes came wooden ones. Half inch square frames mille-ply covered. These were essential, as our transport had moved up to motorcycles.



Eric Lord, one of John Bickerstaffe's old Accrington club-mates, gave me the box I used. Eric had moved on to the next box phase, ¼ inch balsa sheet jobs, light but expensive. Now expanded polystyrene is the latest. I have not found a local source yet, but that's the way I want to go. Above is my flying mate Ian Lomas, at a Nationals in the late 1950's with Eric's box complete with carrying strap for Ian when sitting on the back of my Triumph. Two of us in that tent, I don't think I could do it these days. I got badly sun burned that year and had an awful nights sleep. Happy Days.

I think the best box I ever came across, was in the late 50's, it had 'STOLEN FROM DAVE POSNER' emblazoned in huge letters all along the side. I didn't know Dave Posner from Adam in those days, so the guy carrying it could have been anybody. A good deterrent though.

I've got me a good box now. Out of the blue I get a phone call from Colin Shepherd, one of the Alumwell organisers, he explains that he does not intend to fly big rubber models any more and would I like to have his Jaguar and untrimmed brand new Gipsy. "Yes please" says I. Colin knew that I attempt to fly rubber, as I had buttonholed him as timekeeper for a couple flights at North Luffenham. Having seen my rough and ready models he obviously took pity on me. I picked up the models on my next visit to the Alumwell sports hall. When I got into the hall Colin came over and said "Have you got much room in your car?" "Yes, I'm on my own today" I replied. "Good I've brought the box as well" says Colin. At the end of the day, we went out to the car park and whilst I was loading up my indoor boxes, Colin went off to get his models for me.



Colin Shepherd's Gift box to Yours Truly
(Posed here with Colin's Gipsy and mine, It's my vintage box now)

As I lowered the tailgate of the estate, Colin reappeared, strolling across the car park with this enormous coffin, pictured above, suspended on a couple of rope handles. He opened it up, showed me the Gipsy and Jaguar inside and they looked lost in the cavernous interior of the box. "This is my vintage box" says Colin, "You might as well have it, I've got two more at home. Anyhow the wife will be glad to see the back of it." I was a bit taken aback by the gifts and I'm not sure I managed to thank him properly, so many thanks Colin.

The gift of these models brings me neatly to my next topic, Proxy Flying. I don't know the situation these days, but I remember back in the 50's, you could fly someone else's model under their name. When I went off to do my national service in 1954, I left a Wakefield model to be flown proxy for me, by my mate Ian, in the trials of 1955. Internationally, John Bickerstaffe flew proxy for Sorjo Ranta of Canada in the World Power Championships of 1956.

It would be nice if I could fly Colin's models, under his name, in our comps. It follows that the many models left by absent friends, who are no longer with us, could also be used for their intended purpose.

I have a large fly-off model, ex the late Ian McDonald, which I would love to fly in anger. I was at one of David's hanger meetings, when I noticed a number of rubber jobs piled up in a couple of corners. On enquiring, David gave me the bad news of Ian's passing, then said "would you like one." I replied in the affirmative and David then said "Which one." I then made the mistake of saying "The biggest." David then produced the bits for the model pictured here. I just could not believe the size of it.

When I got it home I assembled it, and it looked even bigger. I had seen Phil Ball's and J Od's fly-off jobs, but when you have one in your hands, OH-Boy! are they big? I weighed it, 200gms. Now, I always reckon same amount of rubber but 200gms of my Tan II, no way, not for sport flying. I dug in



Ian McDonald's Fly-Off Model in your Author's hands

my old rubber box and came up with 160gms of discarded broken motor bits, which I made up into a 16 strand motor. It must have about 20gms of knots in it but it flies OK. That's all folks

Following on from my last offering which, you might recall, featured my garden railway, I thought I really ought to return to what this publication is all about. So going back to the April NC I mentioned the Mini Helides and I'm pleased to report that since then there has been some progress. If you remember, the model was designed for Telco CO2 power but I have been building mine for one of Derek Knight's KP01 electric units. At the time I had covered most of the airframe with Mylar but I was waiting for a good spell of weather to apply the tissue in the garage.



Like several other aeromodellers that I know of, the use of cellulose based dope and sanding sealer has to be regarded as something that is not to be carried out indoors when in mixed company so the application of the tissue had been delayed until there was a warm day and no-one around. A couple of those days did crop up a while back so the opportunity was grabbed and before I knew it the wing and back 75% of the fuselage was top coated in red Esaki. All was good and I put things aside for a day or two before applying a second coat of thinned non-shrinking dope - and then it all went wrong!

As normally happens, the application of tissue to Mylar using thinned dope resulted in those annoying white swirls which I regarded as being the result of our local tap water having a high calcium content due to us living in a hard water area. Normally the next coat of dope would completely clear this and it did but what it also did was seemingly remove small patches of dope. Further coats did not resolve this issue, if anything making it worse. Localised patches of dope didn't work either. It looked horrible! I chatted to Derek Knight about this and he reckoned that the thinners had gone off as had some of his - this is not something I'd heard of but perhaps this is right. Either way I just left everything for a while and contemplated my options.





The Aeromodeller has had several articles over comparatively recent months in which the use of the Deluxe Materials range of Eze tissue, dope and adhesive is mentioned and in some cases detailed. These products have one great advantage over the traditional approach to covering in that the liquids aren't cellulose based. One article that particularly caught my eye described covering Doculam with Eze tissue which looked to me to be much like covering mylar with Esaki. It seems like a possible alternative to cellulose based covering so I invested in some of the products on a recent visit to the Sussex Model Centre.

At the time of experiencing the problem with the Helides covering I hadn't used any of the Eze materials but decided to throw caution to the wind and give the Eze dope a go to see if it would sort out the problem. Clearly this isn't what using this range is about - you'd normally use the whole range as it's a complete covering system but in for a penny and all that! Eze dope is thinned with water prior to application so that's what was done and I painted it on the fuselage. Two coats and it looked great - blotches gone and a nice smooth finish. Result!

I suppose that the next step is to try and do a full covering job using the Eze range and after that to see how it copes with a diesel powered model that needs some repairs. From what I've been told and read it's fuel proof so doesn't need an additional coating to cover that aspect so that's good news.



As for sticking tissue patches onto oily covering and doping them well that's another matter - anyone out there know the answer? Answers to the editor please.
More next time.

Tony Shepherd

Guppy and the Lemon



Last month I emailed John regarding the conversion of an ancient Guppy 2 channel TX to 2.4 GHz and flying my Senior Tomboy on single push button Sequential or Compound control. Here is a summary of that exercise as I reported in our local Club Newsletter "Propwash" for the Hawkes Bay Radio Flyers here in Hawkes Bay, New Zealand. I'm fortunate to have a modelling friend in Christchurch, Barry Lennox now retired, a widely experienced electronics engineer and a Past President of Model Flying New Zealand. A couple of years back, having sparked an interest in early days' Single Channel radio control, **Barry** converted an ancient S/C Pixie to 2.4 modern technology for me. I enjoyed the experience of flying my Senior Tomboy with **compound SC push button** until I unfortunately lost the transmitter out of the rear of my wagon. You can read about that conversion in Barry's article " **New Lamps from Old**"



in Propwash # 147 <https://mfhb.org.nz/newsletter/>



On a recent visit to Christchurch, Barry showed me his own system of S/C flying with a Kraft Single stick TX that he'd converted to 2.4 and added a S/C push button. The idea behind it being that if you get into trouble flying Single Channel, you have the insurance of a conventional stick control to save the day and get back home! No matter how hard I pleaded, he wouldn't part with that TX but did generously offer to have a try at converting an OS Guppy Tx that I acquired a few years pr^{viously}.

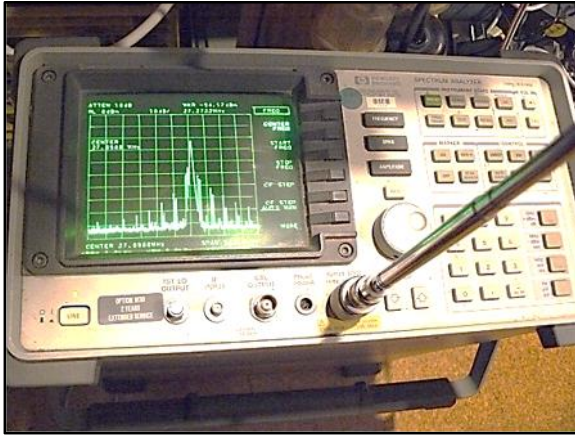
Here is Barry's narrative of that latest conversion of my OS Guppy 2 ch Transmitter

So a couple of months ago, Barrie sent me a quick email, saying he was sending down a Guppy and he suggested it would be good with a Lemon. Well, that sounds tasty, and I just hoped he'd packed it with plenty of ice as the post down here can take a few days.

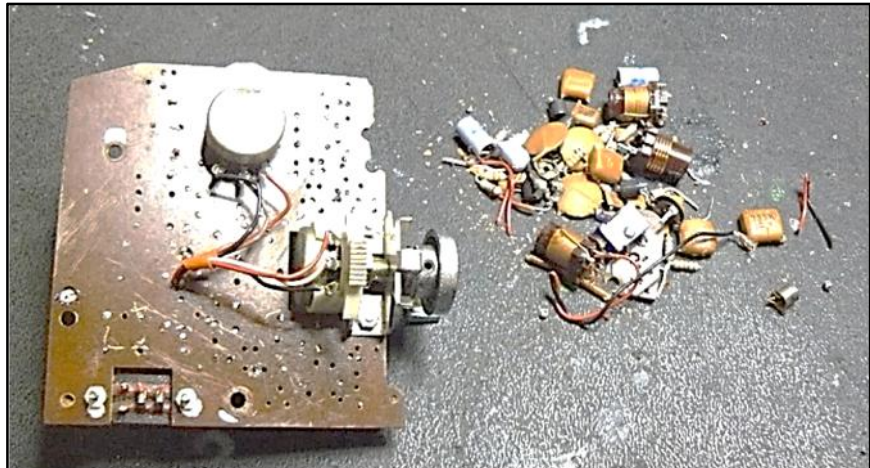
Well, well, it was nothing like that! What turned up was an ancient OS "Guppy" transmitter and a 2.4GHz Lemon transmitter module, they just needed connecting up somehow. I opened up the Guppy and it's an old 2 channel early proportional RC set, with transmitter and 2



servos. As far as I can determine, was sold in the mid 1960's or so. It seems that many of them were used for model boat control. They seem to be rather rare these days, so just for fun I plugged in a crystal (27.125 of course) and a 9v battery, and guess what it? it still radiates!



Well, the next step was to see what could fit in, and the best way to start was to remove all the parts that would not be needed. The initial plan was to desolder all the parts on the PCB, however that was foiled by a fair amount of contact goo on the copper track side, that rapidly turned into a sticky foul smelling mess. So it was out with the smallest side cutters and removed everything. I kept them all and posted them back to Barrie should he eventually decide to return it to the original condition. Good luck, Sir!



Then with a bit of measurement and estimation, it was clear that the Lemon RF board and an Arduino-based encoder would fit easily enough, and the original rudder and elevator stick/pots, which were quite complex and unusual, would still operate and drive the Arduino inputs. To complicate things, Barrie needed a throttle control as well, now the complications became apparent. As the styling of the Guppy resembles a young ladies purse of the 1960's (Recall Mary Quant and Carnaby Street?!) it had nothing at right angles or square, so the new controls had to be at rather strange angles. To compound things, the space available for the throttle control was quite limited, but eventually I found a small one of the correct value, and it's a high quality Mil Spec device to boot

Then we required the "Single Channel Pushbutton" which the Arduino encoder supports rather nicely. Older folks will recall these, it operated in one of two modes :

Sequential.. each button push gives left...right....left...rightetc. Or

Compound. A single push gives (say) left. Then a quick push-push gives the other direction.

Each had its pros and cons, and followers. As the encoder supports both with a minor pin change, this was implemented as well.

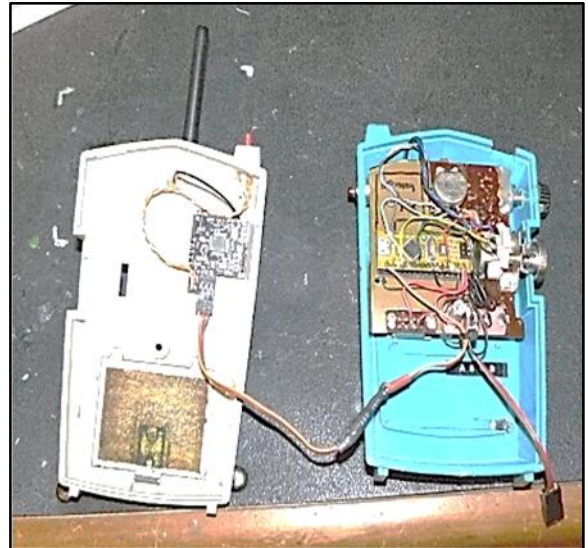
The problem with today's implementation is the tactile feel of the pushbutton. Pushbuttons of old were large, and had a very positive and satisfying feel/feedback "click" to them.



The Guppy case did not allow any such thing, so it will be interesting to see how Barrie finds this. Of course, there is a great Emergency Plan B now though, if this button pushing gets too stressful and panic sets in, you simply ignore it and use the normal rudder stick. Whew! The Single Channel Pushbutton also does double duty by allowing the control throws to be set and calibrated. To enter this, the button is held down before power on, and held on, while all the controls are moved to their limits. The A to D converter in the Arduino reads all this and stores it. This process can be repeated as many times as desired, until you get it perfect.

Then another useful feature was installed. The Lemon Tx module has a tiny button on the PCB that has two modes of operation. Holding it down, then powering on, enters the bind mode thus allowing extra receivers to be bound. Holding it down at any other time enters the low-power range check mode where the power output is reduced by 20dB, or 1/100th of the normal power.

Unfortunately, it is quite difficult to access but it can be extended to an external button. We had just about run out of real estate by now, but fortunately, there was a spare hole for a tiny pushbutton, the hole on the top where the 27MHz antenna used to fit.



Around this time, it became apparent that a better location for the Lemon Tx module was on the case rear, and this allowed the antenna connector to exit in the rear middle.

Then it was necessary to interconnect the various controls and modules, a relatively straightforward job after wrestling with the extra features that were never considered when they designed this thing back around 1960.

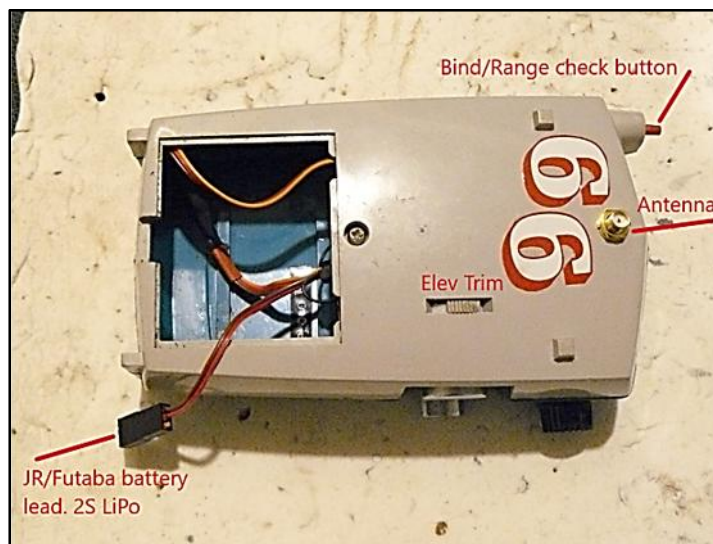
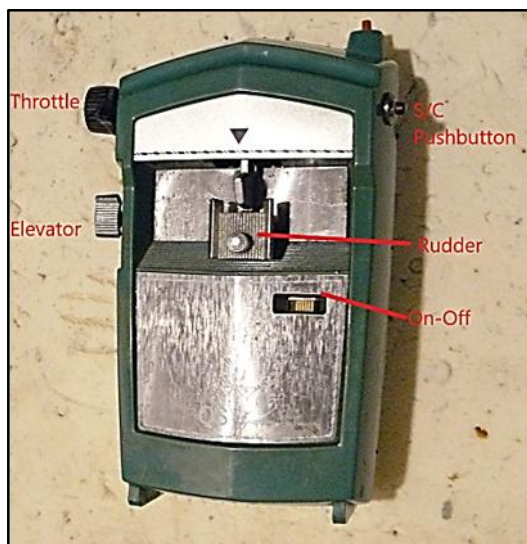
Such a lack of foresight!

Then, over many years, I have learnt that a wise man sets a thing aside for at least 24 hours, then does an independent review and check of wiring or just plain dumb errors. Great, none were found, so a 2S Lipo battery was connected, and it all worked!! An interesting and straightforward conversion, albeit with more work on the mechanics rather than the electronics.

Of course, a programmed Arduino microprocessor (Usually on Aliexpress for \$2-\$3) board is required as the "brains" of the encoder. This was covered in some depth in an earlier article a year or so ago "New Lamps from Old" Sometimes this programming works well, other times it can be a little frustrating, mainly due to the crappy way that "Windoze" supports (or not) ports and drivers. I have 3 PCs of various ages, one works, one does occasionally, a third simply sulks.

1. A small black pushbutton on the RH. side It's set for sequential at the moment. ie: each press gives alternately left ... right leftright.....left...etc. If you want compound mode, you need to open the case (With care, it's a bit stiff) and move the black contact (It has DATA + on it) over to the other pin.
2. The same button lets you calibrate the stick/control movement. To do this, hold the button and keep it in, turn the power on, and then move all the controls to their limits, and then back to center. Then release the button. You can repeat this as many times as you wish, until you get it perfect.
3. The red button on the top is the bind and reduced power control. If you hold it down, then power on, you enter the bind mode, to add other receivers. (Read the Lemon leaflets on this) If you press it at any other time the power reduces by -20dB for a range check. (Should be 30M+) Release it when done.
4. You get servo reversing by holding the control hard over, then powering on. This only works on Elev and Rudder. It's disabled on throttle for safety (esp for electric)!!
5. There's a 3 pin plug and socket on the Lemon Tx module. If removing it, make sure the red paint patches are adjacent. when reinserting it.
6. Don't turn it on without the antenna connected, Lemon suggests it will damage the Txer module!

So here's the final operator's manual;



All the best, young Barrie with all this new fangled stuff!

Barry Lennox, Christchurch. NZ.

Post Script.

The experience to date has been a great success with some delay waiting for suitable calm weather. I flew and trimmed the Snr Tomboy for a start using the rudder, elevator and throttle controls and once I had the model flying reasonably straight, climbing under full power, level flight just cruising and with a positive glide. Changing to single channel was interesting, we had it set up for compound initially



but at times that got a bit confusing and we've reverted to sequential, push and hold for right and two pushes and hold for left and that way I felt I had a better grasp of where I was at and what I wanted next. With the model well-trimmed, it proved easy to fly and the challenge for us was to cut the motor at height and try to land the model at one's feet with no other control input other than the SC Button. That proved to be a challenge at first especially if the conditions changed with the input of wind.

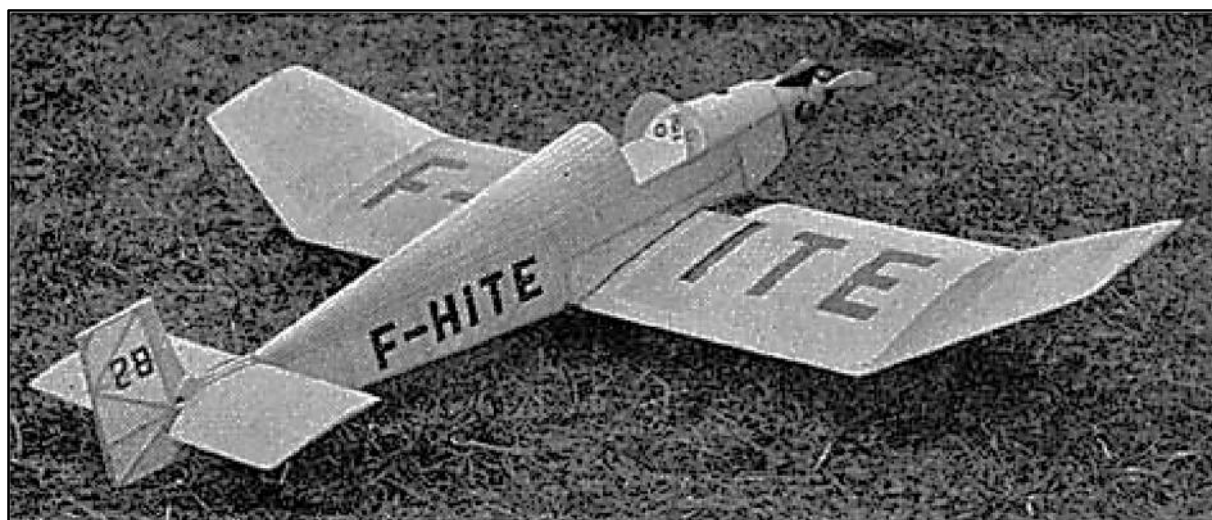
Needless to say we prevailed and I can see some interesting days ahead when the conditions are suitable with a number enjoying the experience of yesteryear SC control and playing pass the transmitter and precision landing competitions.

It's been a very satisfying experience and I'm looking forward to some relaxed flying with Guppy and Tom over the coming summer months.

Barrie Russell. Model Flying Hawkes Bay, NZ.

Occasional Notes from North Wales October 2025

Another good read with the latest issue of the NC. Looking at John's write-up on the Coventry Gliding Club activities - for reasons totally unknown it made me think of the Jodel D-9 Bebe - maybe seeing all the pics of glider tugs? A quick search of our plan library yielded a couple of plans from the USA for RC versions but nothing else. However, I had a vague memory of an Aeromodeller plan in the dim & distant past. A dip into Outerzone produced the goods with an article & plan for the Bebe from June 1955 Aeromodeller. Then the brain cells clicked in as, of course, it is within the decade of Aeromodeller mags that I did retain so probably & more recently I've reread the mag. Thus the Jodel D-9 Bebe is the power plan of the month - see later. Another good candidate for Mills .75 propulsion & a bit of gentile free flight flying scale power!



The model

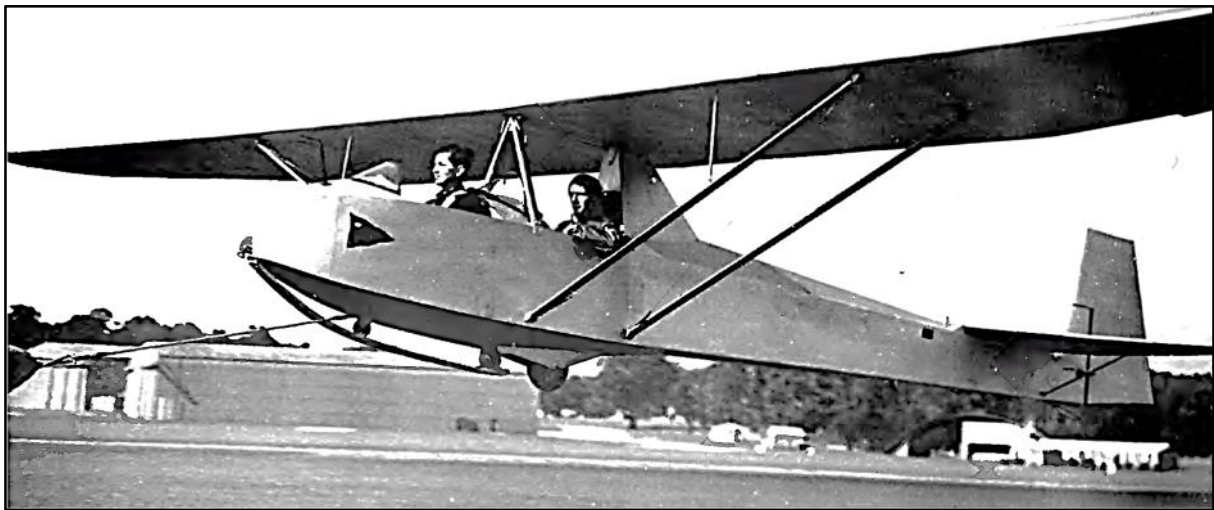
A further quick search indicated that for a mere £4K or nearest offer, one could be purchased in flying condition - full size of course. To quote "my Jodel D-9 Bebe is, reluctantly, for sale. Built in Belgium in 1977, it was the 517th D-9 completed. It is powered by a 1600cc VW Beetle engine, 861 hours. Poncelet prop. Total airframe hours 1255. Permit to September 2025. Steerable tailwheel, disc brakes. It's slightly tatty but flies beautifully. As seen in Pilot Magazine September 2013."

Would that I be a few years younger!



Full size version for sale

That, of course, takes us onto the gliders being towed. Those in the pics all looked to be "modern" & no doubt hi-tech, composite materials, ultra efficient & almost certainly imported into the UK. Does anyone remember Slingsby, based in Kirkbymoorside, Yorkshire. I have three separate recalls: the first when we lived in Scarborough in the early 1960's & Kirkbymoorside (the site of the Slingsby factory & airfield) was close enough to take the family to do a bit of eye balling; the second was early days at Middle Wallop when we all used to fly free flight models aplenty interspersed with a hack old Land Rover equipped with a winch that used to hare all over the field towing the occasional para-glider & sometimes parked winching up an old(ish) Slingsby sailplane up (can't remember what it was), interrupted from time to time by a full size light aircraft take-off or landing movement. All populations, other than the modelling community, assumedly part of the Army Air Corps based at MW - in those days we all operated happily in harmony; the third being at Lee on the Solent in the very early 2000's & living near to HMS Daedalus airfield which was then used by the Portsmouth Naval Gliding Club, who possessed a bright yellow (I think) T31(?) that from time to time made stately flights over our house. It was winched up & you could hear the wind whistling through the winch cable as it went up. Eventually Fareham Borough Council purchased the airfield & evicted the PNGC, who moved initially to Middle Wallop & then on to Upavon.



RN T31 in the early 1950's

Slingsby went through various changes of ownership before being bought out by Marshalls of Cambridge. During one of their times of ownership changes, they ventured into the world of hovercraft & produced the SAH2200, an example of which appeared in the James Bond film "Die another Day" & is preserved in the Hovercraft Museum at Lee on the Solent. Occasionally the engine was run up but as the craft was parked outside & had a propensity to leak, it filled up with rainwater from time to time which rather limited engine runs. The Royal Marines had several - may still have? At the time, I was a volunteer at the Museum until the move to North Wales.

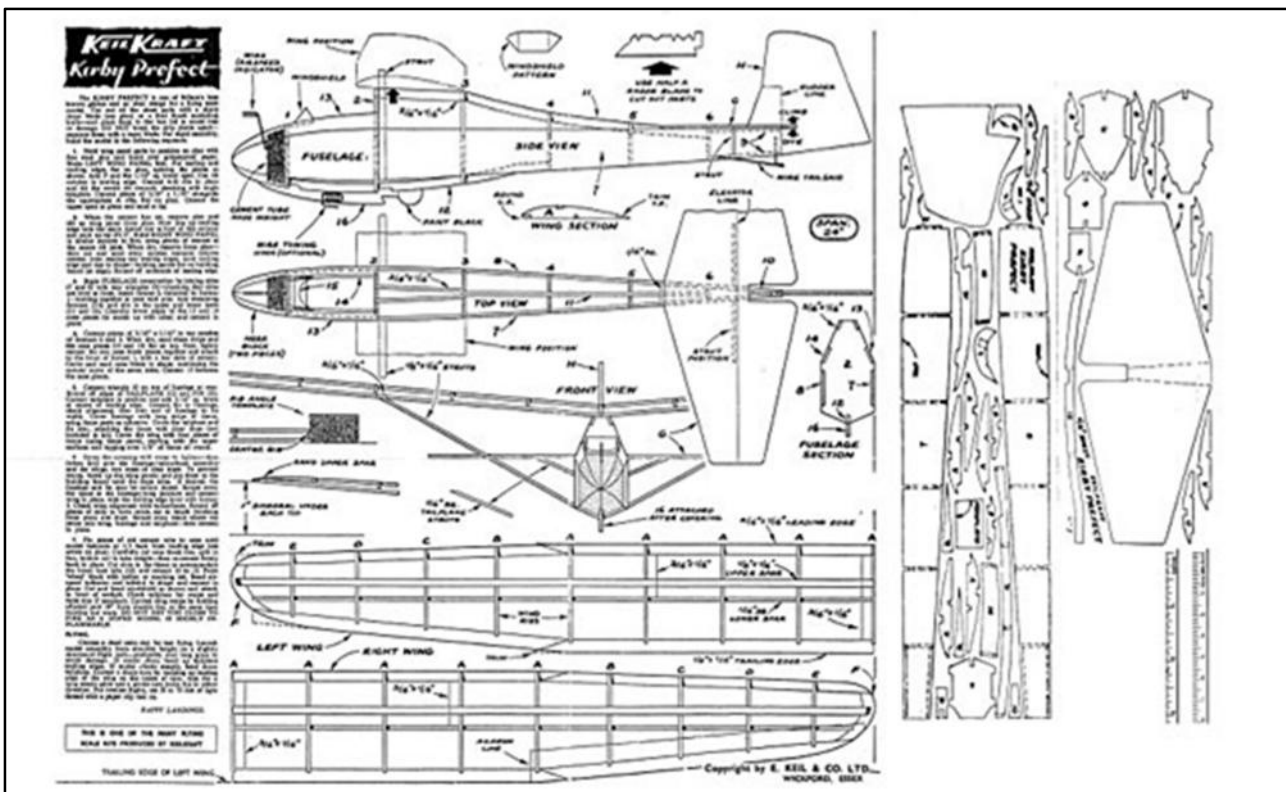
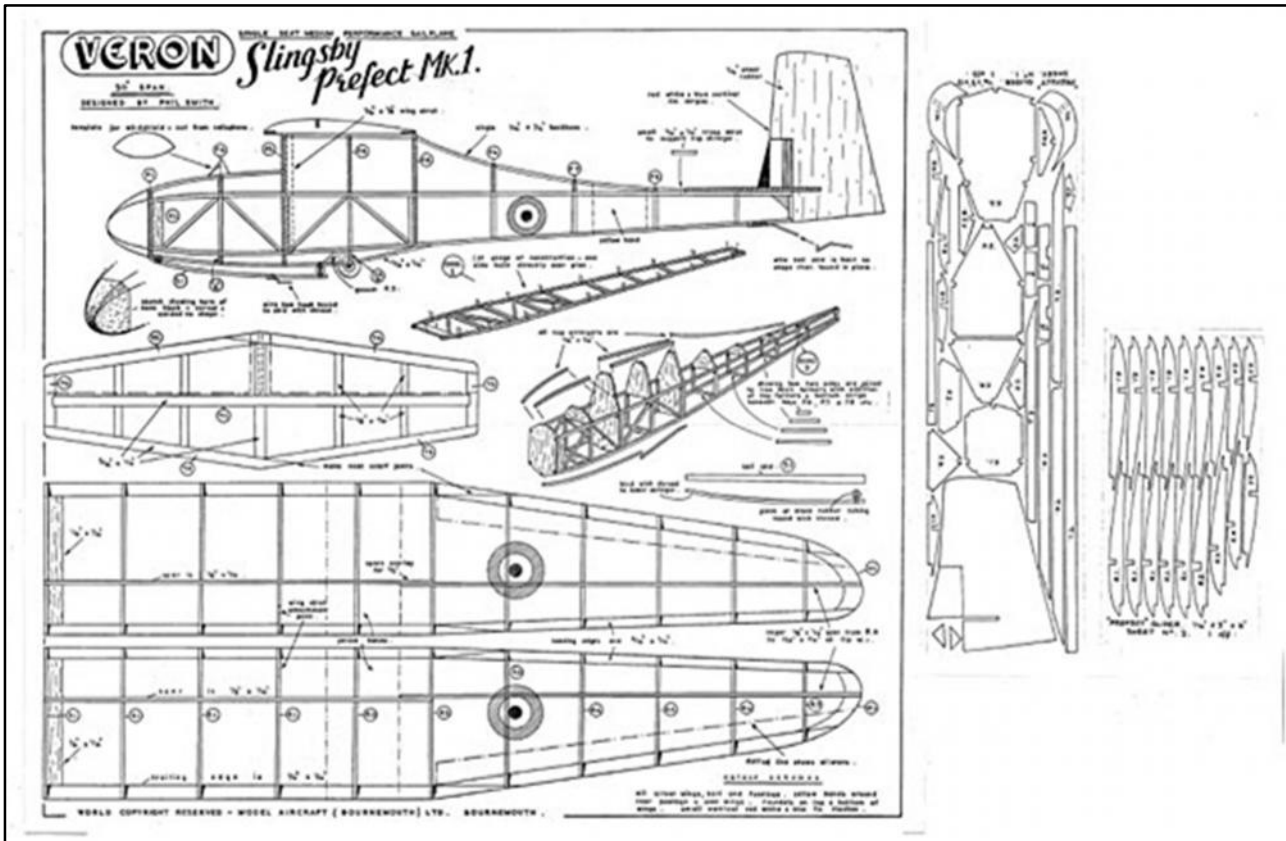


SAH 2200 in Portsmouth Harbour 2010

The RC Library has a pdf version of Slingsby Sailplanes by Martin Simons, well worth a read by anyone interested in full size gliders. It can be accessed via the RC Library -

[RCL : Slingsby Sailplanes : download free vintage model aircraft PDF title .](#)

And so to models. The Vintage Model Co produce a 30" replica of the original Veron Slingsby Prefect & Keil Kraft produced a 24" version as the Kirby Prefect - both in their respective Flying Scale series. Plans of both originals are available from the Outerzone website. A search on Slingsby Model Gliders produces a variety of modern laser cut kits for RC, thus plenty of choice.



The Nationals: don't know whether our Hon Editor received any info or pics on the recent Nats. at Sculthorpe. Having had a quick look at the results, I'm guessing there wasn't a great attendance? Shame really when considering what used to be - but there again, it's a sign of the times. I have vague images in my mind of the first Nats I went to in the '50s at Waterbeach as a junior club member, travelled in the Club coach & was blown over by the hordes of people. A lasting memory was a pulse jet being started up in/on a control line model & it circulating at what seemed an immense speed - the noise & the rush of people to the circle to watch it!



The coach was provide by Soul Bros of Olney, who started the business in 1923 & are still going - ignore the ladies on pancake race duties, this was the coach on which we travelled.



What defines happiness as a modeller?

Was it the first successful flight as a junior?

The first thermal (& lost model - as sure as night follows day!).

Or a full house in a comp where you never expected to place anywhere?

Be interesting to see some responses from readers.

How about it?

**Happiness
is a
big glider**

Roger Newman

Secretary's notes for October 2025

The Croydon Coupe Europa / SAM1066 day is due to take place on either the 4th or 5th of October. The exact date will be announced on the Thursday before and will depend on the weather forecast for the weekend.

Croydon will be running their usual F1G and Vintage Coupe
while SAM1066 classes will be:

Combined A1, Classic, Vintage Glider

Mini Vintage Rubber, Power, Glider (15sec motor run for Power)

E20 to NFFS Rules (20sec motor run, 90 sec max)

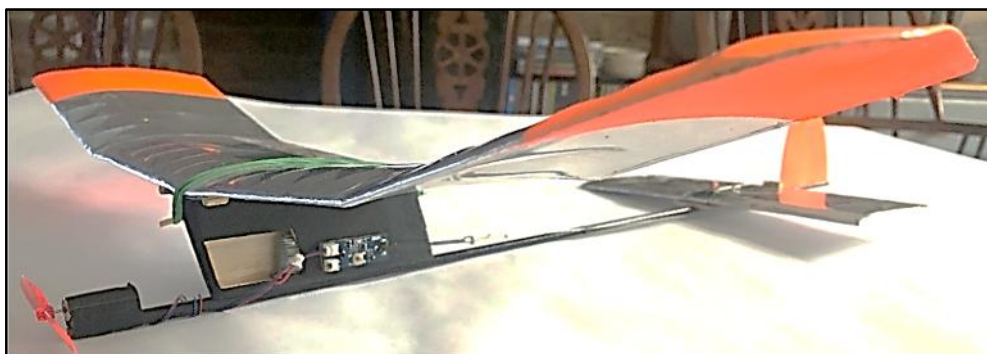
See announcement in this issue for further information.

+-----+

E20 is a class increasing in popularity, with a programme of contests run by the Peterborough club at Buckminster whilst Aeromodeller editor Colin Sharman will be running comps at the Oxford MFC event on the 18th of October and the Birmingham Classic on the 1st or 2nd of November. Another keen advocate of the class is Chris Edge and he has posted the following on the Facebook E20 Group,

"A note for the GB E20 fliers. I've proposed a rule change to the FFTC to add E20 with a 20s run to the "Micro Group" so that we can fly them in more contests in 2026. If you agree with this please lobby the FFTC via Simon Dixon".

In response to a comment on the proposal Chris pointed out that models would have to be flown to a 2min max as per the Micro Group. Organisers of club contests would obviously continue to be free to decide on any motor run/ max they consider appropriate for their flying site /weather conditions. For those readers



who are on Facebook see the E20 Free Flight Model Flying group for more comments.

Ray Elliott

LEADING EDGE 1/16 SQ

W7W

1/16 SQ

GUSSETS

WING

ALL WING RIBS W1

TRAILING EDGE 1/16 x 1/8

W2 GLUE TWO TOGETHER FOR EACH WING TIP

NYLON THRUST BEARING. NOTE THAT IT IS GLUED AT A SLIGHT DOWNWARD ANGLE. THIS IS IMPORTANT FOR GOOD FLYING MODELS.

1/16 SQ

STABILIZER

GUSSETS

COVER TOP OF FUSELAGE WITH PAPER. SEE SHEET 2 OF PLAN.

WASHERS

ADD WEIGHT TO BALANCE

MAKE EXHAUSTS FROM 1/16 SQ BALSA

NOSE BLOCK DETAIL

DO NOT GLUE IN FUSELAGE, MUST BE REMOVABLE FOR WINDING AND CHANGING RUBBER MOTORS

ENGINE DETAIL

MAKE SPARKPLUGS FROM CUT OFF PINS

CONTROL OUT LINES CAN BE MADE WITH 1/32 WIDE BLACK TAPE AVAILABLE AT HOBBY AND STATIONERY STORES

1/16 SQ

CUT OUT GRILL FROM SHT. 2 OF PLAN

RADIATOR CAP. MAKE FROM SCRAP BALSA

1/16 SQ

USE PIN FOR REAR RUBBER RETAINER

SAND TO FIT FUSELAGE

RADIATOR DETAIL

POWER: ONE 100P 2MM PIRELLI OR 1/8 BROWN RUBBER

9/16 DURAL

40 HP MODEL "A" FORD ENGINE

MAKE RADIATOR HOSE FROM SCRAP BALSA

1/16 x 1/8

APPROX. 2" to 3" DOWNTHRUST

GLUE PAPER DISK CLIP FROM SHEET 2 OF PLAN. USE BALSA THIN. CONTACT CLIP. WORK BEST FOR THIS.

WRAP WITH 1/4" LEAD AND GLUE

1/16 x 1/8

1/32 MUSIC WIRE IN KIT

FOR MODEL TO TAKE OFF GROUND TRIM 1/4 INCH FROM EACH TIP WITH SCISSOR

PAINT TIRES BLACK

1/16 SQ, ADD AFTER FUSELAGE IS CONSTRUCTED

1/16 SQ

REMOVE TISSUE THIS AREA FOR INSTALLING RUBBER MOTOR

LANDING GEAR PATTERN

2 REQUIRED

F1 GLUE TWO TOGETHER

F5

1/16 SQ

77W

RUDDER

MAKE FROM PIN

SHEET 1 OF 2

P.P.

Pietenpol Air Camper

13 INCH SPAN PEANUT SCALE MODEL

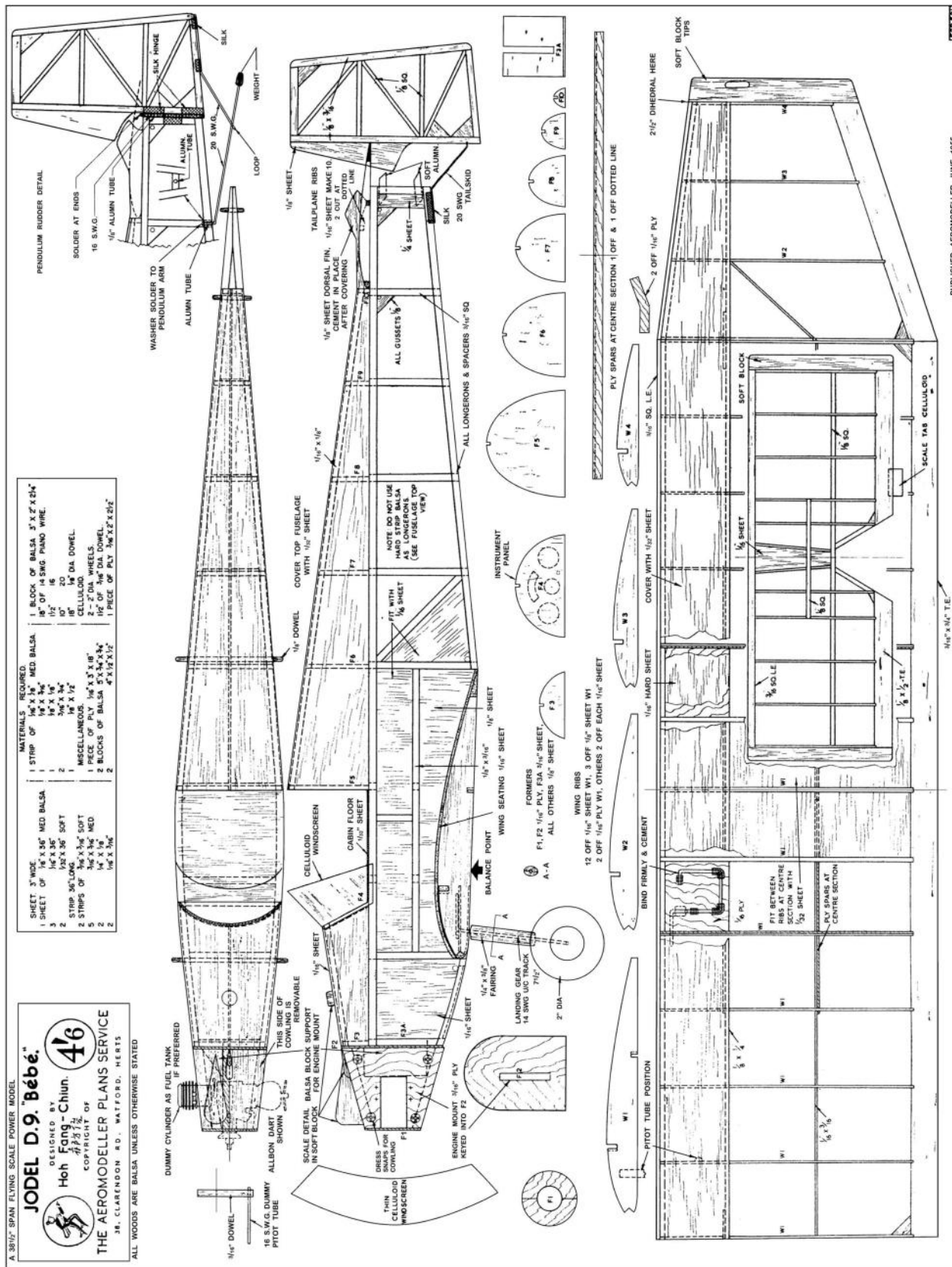
MODEL DESIGNED AND DRAWN BY BOB PECK

Peck-Polymers

P.O. BOX 2498 LA MESE, CALIF 92041

COPYRIGHT 1972 BY PECK-POLYMERS

Power: Jodel D-9 Bebe from Aeromodeller of June 1955 - needs a spare Albon Dart



FULL SIZE COPIES OF THIS 1/4th SCALE REPRODUCTION OF THE A.P.S. DRAWING CAN BE OBTAINED PRICE 4/6. POST FREE FROM THE AEROMODELLER PLANS SERVICE.

Roger Newman

Events and Notices

Southern Coupe League 2025

Provisional list of qualifying events as at 21/4/25

Now that the FFTC calendar for 2025 is settled the following events are (reasonably) confirmed and form the list of qualifying events for 2025.

1	Croydon Cagnarata	14 th or 15 th June	Salisbury	ray.elliott8@btinternet.com
2	Crookham Gala	28 th or 29 th June	Salisbury	chrisredrup@yahoo.com
3	BMFA Nationals	25 th August (3 rd day?)	Sculthorpe	Check day
4	Oxford Duration	30 th August 09.30–13.30	Portmeadow	gmlaw7@btinternet.com
5	Birmingham Classic	20 th or 21 st September	Luffenham	gavin.manion84@gmail.com
6	Coupe Europa	4 th or 5 th October	Salisbury	ray.elliott8@btinternet.com
7	Coupe de Brum	1 st or 2 nd November	Luffenham	gavin.manion84@gmail.com
8	Buckminster Gala	15 th or 16 th November	Buckminster	stuardarmonf1a@yahoo.com

The scoring system is as last year, 12 points for 1st place then 9 for 2nd down to 1 for 10th, all regardless of the number of entries.

Best 5 from 8 events to count, in the event of a tie at the end of the season then the number of 1st, 2nd etc. places will be used to resolve.

Additional events may become available as the year progresses and any other "privateer" events which people may choose to hold will be notified as they become available.

Croydon Coupe Europa & SAM1066

4th or 5th October:

Salisbury Plain Area 8. Start 10.00

Croydon Classes:

F1G (in rounds) & Vintage Coupe

SAM1066 Classes:

Vintage / Classic Glider (combined) to SAM1066 rules,
Vintage / Classic Power (combined) to SAM1066 rules,
Mini Vintage to BMFA rules,

Actual date will be decided before the contest
on the Thursday 2nd Oct. dependant on weather forecast.

BUCKMINSTER FF GALA 2025

This year's Buckminster Gala will be held at
BMFA National centre on
EITHER 15th. or 16th November,
 starting 10 AM. Decision will be made on Nov. 13th
 and posted on FFTC & BMFA website- check before
 travelling. Fallback dates are 22nd / 23rd if needed.

Classes will be;

Combined P30/ Coupe d'Hiver - Classic A1 Glider

BMFA Classic Glider (50m. line) - E36 (5 sec. run)

Mini- Vintage - *Vintage HLG/ CLG (see below))*

HLG/ CLG has not been popular at Buckminster, so in the spirit of this event, we're trying something different this year. Eligible models are any hand- launched glider published before Jan.1951, which if desired may be fitted with a catapult hook, small finger grip and appropriate DT. All other rules as per BMFA HLG/ CLG. Further info from:

gavin.manion84@gmail.com

Certificates and prizes to 3rd place in all classes
 (including genuine Champagne for top VHLG/CLG)

Contact Stuart Darmon:
 Tel. 01858882057 - stuardarmonf1a@yahoo.com

Permits for Salisbury Plain & North Luffenham

There is a tab on the free Flight Technical Committee website
 Where you can apply and buy the permit that you require on line

The costs are:
 £30 for Salisbury Plain - £35 for North Luffenham

The details of the Conditions of Issue
 And Code of Conduct are included with the application
 And must be strictly followed

Options for Flying on Salisbury Plain, Area 8

The flying of competitive events on Salisbury Plain occasionally requires the launch site to be changed from the usual trimming field to the north east side of the airstrip. This is often problematic as in the past access has proved difficult but a new route has now been found which has proved to be much easier, even after wet weather. The image below shows the route.

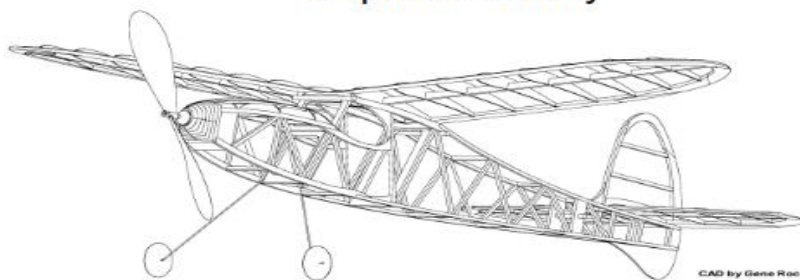
It is hoped that on competition days organisers will place their entrance marker flags in whichever entry to Area 8 is appropriate to the location of the day's launch point.



INDOOR MODEL FLYING IN BANGOR

Brailsford Centre, Ffriddoedd Road,
Bangor LL57 2EH,
what3words : ///drizzly.chained.neck

Regular flying meetings in a 22x20x9m hall,
September-May



Dates

5.10.2025, Sunday, 1500-1700
2.11.2025, Sunday, 1500-1800
7.12.2025, Sunday, 1500-1800
4.1.2026, Sunday, 1500-1700

More dates pending, first Sunday of each month to May.

Fees £15/2hr £20/3hr session

Contact: members@sam1066.org

Beginners Welcome

SUPERLIGHT CARBON E-20 AND HLG BOOMS

New stock just in.

First come, first served.

**Carbon rod blanks, ideal for E-20s
and hand or catapult-launched
gliders. Long enough for two booms.**

**97cms long, 4mm diameter tapering
to 1.5mm. 3.4 grams, but some wet-
and-dry action will lower this figure.**

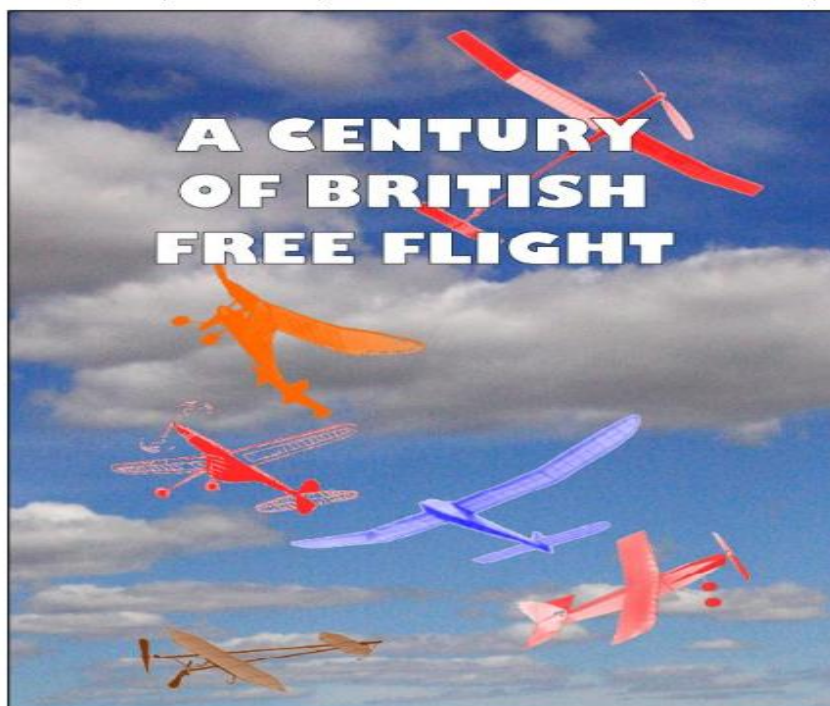
**£8.00 each + postage from Martin
Dilly on +44 (0)208 7775533 or
martindilly20@gmail.com.**

A CENTURY OF BRITISH FREE FLIGHT

A new book, *A Century of British Free Flight*, has just been published to mark the BMFA's centenary. 155 pages of text, plans and photographs in colour and black and white trace the development and history of free flight from before Bleriot crossed the Channel to the present day. Nine authors have pooled their talents to cover everything from the rise of the Vintage movement to electronic timers and GPS tracking.

The histories of gliders, scale, rubber, electrics, power models and indoor are all explored by people who've spent most of their lives flying their classes. Although there's no 2022 Free Flight Forum Report we think *A Century of British Free Flight* will more than fill the gap. All proceeds will go towards defraying the expenses of those representing the United Kingdom in teams competing at the World and European Free-Flight Championships.

The UK price is £20.00 on the flying field or £22.00 by mail; to Europe it's £25.00 and anywhere else it's £28.00. Cheques should be payable to 'BMFA F/F Team Support Fund' in pounds sterling, drawn on a bank with a UK branch; you may also order by credit card, which is a lot easier (and cheaper).



Copies are available from:
Martin Dilly, 20, Links Road, West Wickham, Kent BR4 0QW
or by phone: (44) + (0)20-8777-5533,
or by e-mail to martindilly20@gmail.com.

E30/RDT/BMK/E20 Batteries

The 75mAh lipo's which I sell for E30 now come with Micro JST plugs which make them suitable for BMK timers etc. Since they do not have the current limiter, they work well with the Band Burner and can also be used as lightweight E20 batteries. Just send me £10 and I will put 4 in a Jiffy bag

Ron Marking, Pros Kairon, Pennance Road, Lanner, Redruth TR16 5TF. Alternatively, use PayPal but e-mail me your address. ron.marking@btinternet.com

DILLY JAP IS BACK -AGAIN

Well, that seventh roll of tissue went pretty fast, 300 yards in a bit under three years. I've just received a new roll; almost inevitably there's a slight price rise but it's still only £15 for a five yard roll a yard wide, or £17 by mail to the UK, folded. I normally sell it in rolls at contests, but if you want yours mailed in a roll let me know and I'll sort out a length of plastic pipe and find a courier price. Doing the sums, there's now well over a mile of Dilly Jap covering models all over the world.

To re-cap on the details, it's 12 gm/M² and has a strong unidirectional grain. It's white and low absorbency, so remains very light when doped. For those of you old enough to remember, it's identical to the Harry York tissue sold at his South London model shop in the 1950s.

I'm on 0208-7775533 or e-mail: martindilly20@gmail.com

INDEPENDENT REVIEW OF DILLY JAPANESE TISSUE

The following appeared on the Hip Pocket Aeronautics Builders' Forum. Nine different tissues were tested, doped and un-doped.

"I am really impressed with how well this tissue performed. Dilly Jap tissue with 2 coats of thinned nitrate dope is around 8% stronger than the old 00 Silkspan with 2 coats of dope, yet Dilly Jap is 0.09 grams per square foot lighter. Here are the test results:

Test#	Tissue Type	gm/sqft	Avg Ten Str lb	Spec Str lb/gm
9a	Dilly tissue (UD)	1.20	14.74	12.28
9b	Dilly Jap Tissue (D)	2.04	19.70	9.66

So far, the Dilly Jap tissue has the highest specific strength of all the tissues and Silk-spans tested. Doped Dilly Jap has nearly double the strength of doped Japanese Esaki tissue and yet doped Dilly Jap weighs 0.1 grams per square foot less than doped Esaki. Dilly Jap can't be beat for weight critical contest models requiring the torsional rigidity afforded by tissue papers!"

FREE FLIGHT FORUM REPORT 2021

Indexy Dunsin - A Challenge To Conventional Design - Tony Webb
Cape Is A Bee - Gavin Mason
Building Other People's Visions - Stuart Dancer
The Mikes Or Ray Markle - Simon Owen
Simulated 3D Flight Dynamics - An Approach To Gain Insight For
Trimming And Aircraft Development - Peter Martin
Building Dummies - Phil Bell
Time Your Model Reel - Mike Woodhouse
What Next For A Lady Flyer - Sue Johnson
F3 Re - R For The Aging Free Flyer - Andy Seabrook
From Nichola To Robin II - Mike Harrison
Further Thoughts On Carbon Skinned Wings For F1a - Stuart Dancer
Geo Forging And Electronic Stability - John Emmel

The UK price is £13 including postage; to the rest of Europe it's £16 and everywhere else it's £20. Forum Report sales help to defray the heavy expenses of those who represent Great Britain at World and European Free Flight Championships. Cheques should be payable to UMFA FF Team Support Fund in pounds sterling and drawn on a bank with a UK branch. You can also pay by credit card, which is far easier (and cheaper).

Copies are available from: Martin Dilly, 20, Links Road, West Wickham, Kent BR1 0QW
Or by phone: +44(0)2087775533 Or e-mail: martindilly20@gmail.com



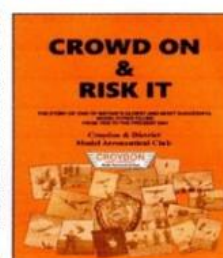
CROWD ON & RISK IT

This is the story of one of Britain's oldest and most successful model flying clubs, Croydon & District MAC, from 1936 onwards. The club contributed much to aviation, both model and full-size, and the late Keith Miller compiled its history till around 1960. Now, this up-dated 73 page version of the club's history, copiously illustrated with many previously unpublished photos, takes the Croydon saga up to the present. Contributions by past and present members vividly capture the atmosphere of the heyday of free-flight, with almost weekly contests at Chobham or Basingstoke.

53 designs by Croydon members have been published in the model press and 24 of its members have represented Great Britain in World and European Championship teams. Several have gone on to notable careers in aerospace. Crowd On & Risk It covers all this and more.

Just £10 by PayPal or cheque

Contact Martin Dilly (martindilly20@gmail.com), phone/fax 020 8777 5533 or write to 20, Links Road, West Wickham, Kent BR1 0QW for your copy.



FREE FLIGHT SUPPLIES

MICHAEL J. WOODHOUSE

12 MARSTON LANE, EATON, NORWICH

NORFOLK, NR4 6LZ, U.K.

Tel/Fax: (01603) 457754 International Tel +44-1603-457754

e-mail: mike@freeflightsupplies.co.uk.

Web site: <http://www.freeflightsupplies.co.uk>.

Face book <https://www.facebook.com/groups/266212470107073/>

I supply items, which are needed by the free flight modeller, or any other modeller, items that cannot be readily obtained through the normal model shop outlets. I also believe in the builder of the model principal so what you will find, on my list, are components, plans and kits etc. Although I am not a shop, if you are passing through Norwich, you are welcome to call in, a quick telephone call first to check that I'm at home will save a wasted diversion.

ORDERS and PAYMENT

Place your order by telephone, by e-mail, CASH, DIRECT TO FREE FLIGHT SUPPLIES BANK ACCOUNT, CREDIT/DEBIT CARD, MORE!

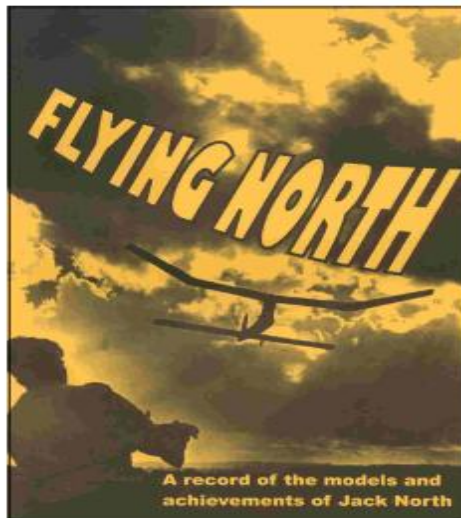
WESTERN UNION, PAYPAL

AVAILABLE

LIGHTWEIGHT COVERING MATERIALS - HI-TECH MATERIALS - FIXINGS - RUBBER - RUBBER MODEL PROPELLERS - TIMERS - KP AERO MODELS - TOOLS - PLANS - KITS - "HOW TO DO IT" PUBLICATIONS - BOOKS.

Full details of the above items are on the Free Flight Supplies Web site.

THIRD RE-PRINT JUST ARRIVED



FLYING NORTH A goldmine for vintage and nostalgia model flyers -

FLYING NORTH traces the model flying career of Jack North, one of only three people to represent the UK on all three outdoor free flight teams, - Wakefield, Power and Glider. It covers his flying and models from 1938 onwards and includes no less than 24 of his previously-unpublished designs.

FLYING NORTH was compiled and edited by two of Jack's Croydon clubmates, David Beales and Martin Dilly, who had access to Jack's extensive notebooks, photographs, drawings and his original models.

FLYING NORTH is a fascinating 163 page book and includes 130 photographs, reminiscences by colleagues, re-prints of all Jack's published plans and articles, including his later extensive work on thermal detection, and an outline of the professional career that also made him such a respected name in high-speed aerodynamics.

FLYING NORTH proceeds go towards the costs of the national teams representing the UK at World and European Free-Flight Championships.

READERS' FEEDBACK

"... no other modeller's life and times can ever have been so comprehensively covered"

"I hope it becomes a classic."

"I am glad I bought Flying North. such a huge chunk of nostalgia"

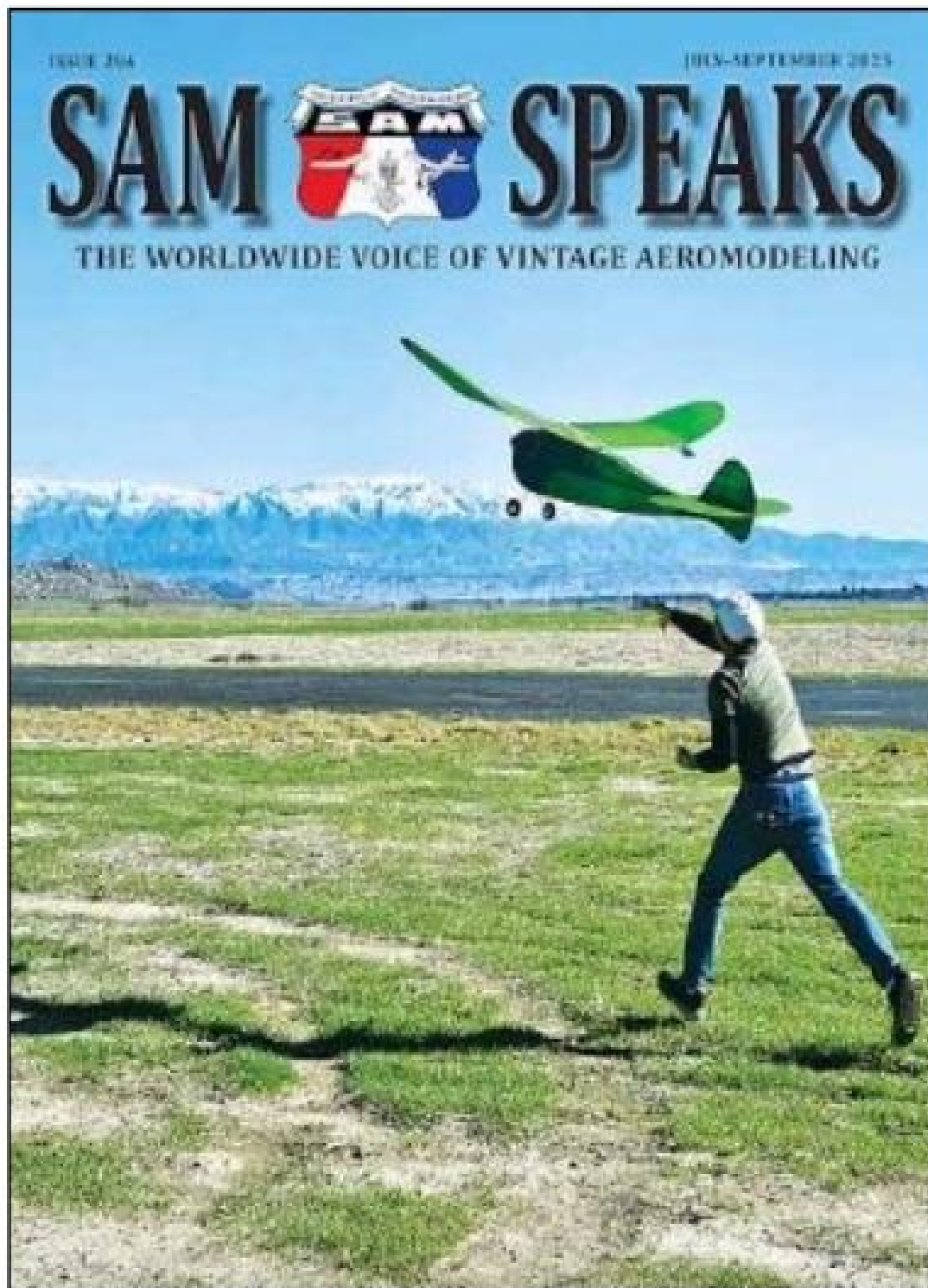
"... am immensely impressed. A splendid effort"

"A fitting memorial to an unforgettable personality. I am sure the book will become an instant classic, treasured by aeromodellers all over the world"

"A very balanced record of Jack's modelling and professional activities"

"The best aeromodelling book since the Zaic Yearbooks"

Price £22.00 in the UK, £26 airmail to Europe and £32 elsewhere.
Contact Martin Dilly on +44 (0)208-7775533 or e-mail martindilly20@gmail.com



**This bi monthly emagazine can be obtained from the
Society of Antique Modellers. Web site**

<http://www.antiquemodeler.org/>

for the modest cost of \$30 pa.

**Quite a few UK people already belong,
but a few more might help our Parent Body!**

Provisional Events Calendar 2025

With competitions for Vintage and/or Classic models
All competitions are provisional. **Check websites before attending**

February 22 nd or February 23 rd	Saturday Sunday	Coupe De Brum, Luffenham
March 9 th March 23 rd	Sunday Sunday	BMFA 1st Area BMFA 2 nd Area
April 6 th April 18 th or April 19 th	Sunday Friday Saturday	BMFA 3 rd Area Northern Gala, Luffenham
May 4 th May 24 th or May 25 th	Sunday Saturday Sunday	BMFA 4 th Area London Gala, Salisbury Plain
June 1 st June 14 th or June 15 th June 28 th or June 29 th	Sunday Saturday Sunday Saturday Sunday	BMFA 5 th Area Croydon, & 1066, Salisbury Plain Crookham Gala, Salisbury Plain
July 6 th July 26 th or July 27 th	Sunday Saturday Sunday	BMFA 6 th Area Southern Gala, Salisbury Plain
August 9 th or August 10 th August 23 rd August 24 th August 25 th	Saturday Sunday Saturday Sunday Monday	East Anglian Gala, Sculthorpe FF Nationals , Sculthorpe FF Nationals , Sculthorpe FF Nationals , Sculthorpe
September 7 th September 13 th & September 14 th September 14 th September 20 th or September 21 st	Sunday Saturday Sunday Sunday Saturday Sunday	BMFA 7 th Area Stonehenge & Equinox cups, Sculthorpe Southern Area BMFA Gala, Odiham Birmingham Classic, Luffenham
October 4 th or October 5 th October 12 th October 25 th or October 26 th	Saturday Sunday Sunday Saturday Sunday	Croydon & 1066, Salisbury Plain BMFA 8 th Area Midland Gala, Luffenham
November 15 th /16 th or November 22 nd /23 rd	Sat or Sun Sat or Sun	BMFA Mini Gala, Buckminster
December 6 th or December 7 th	Saturday Sunday	Coupe de Brum, Luffenham

Please check before travelling to any of these events.

Access to MOD property can be withdrawn at very short notice!

For up-to-date details of SAM 1066 events at Salisbury Plain check the Website

www.SAM1066.org

For up-to-date details of all BMFA Free Flight events check the websites

www.freeflightuk.org or www.BMFA.org

For up-to-date details of SAM 35 events refer to SAM SPEAKS or check website

www.SAM35.org

Useful Websites

SAM 1066	-	www.sam1066.org
Mike Woodhouse	-	www.freeflightsupplies.co.uk
BMFA	-	www.bmfa.org
SAM 35	-	www.sam35.org
National Free Flight society (USA)	-	www.freeflight.org
Ray Alban	-	www.vintagemodelairplane.com
Belair Kit's	-	www.belairkit's.com
Wessex Aeromodellers	-	www.wessexaml.co.uk
US SAM website	-	www.antiquemodeler.org
Peterborough MFC	-	www.peterboroughmfc.org
Outerzone -free plans	-	www.outerzone.co.uk
Model Flying New Zealand	-	www.modelflyingnz.org
Raynes Park MAC	-	www.raynesparkmac.c1.biz
Sweden, Patrik Gertsson	-	www.modellvänner.se
Magazine downloads	-	www.rclibrary.co.uk
South Bristol MAC	-	www.southbristolmac.co.uk
Vintage Model Co.		www.vintagemodelcompany.com
John Andrews		www.johnandrewsaeromodeller.webs.com

control/left click to go to sites

Are You Getting Yours?

- Membership secretary

As most of you know, we send out an email each month letting you know about the posting of the latest edition of the New Clarion on the website. Invariably, a few emails get bounced back, so if you're suddenly not hearing from us, could it be you've changed your email address and not told us? To get back on track, email membership@sam1066.org to let us know your new cyber address (snailmail address too, if that's changed as well).

P.S.

I always need articles/letters/anecdotes to keep the New Clarion going, please pen at least one piece. I can handle any media down to hand written if that's where you're at. Pictures can be jpeg or photo's or scans of photos. I just want your input. Members really are interested in your experiences even though you may think them insignificant.

**If I fail to use any of your submissions it will be due to an oversight,
please feel free to advise and/or chastise**

Your editor

John Andrews