



NEW Clarion

SAM 1066 Newsletter

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Editorial

Free-Flight Nationals been and gone. One good days flying and two wet and windy ones to follow. I report on my own participation on the first day, then it's Pizzas and a model recovery tale of Colin Shepherds fly-away Dixielander.

Rachel, my long suffering wife and fetchermite, had her nice new electric bike on hand for recovery purposes but with an energetic Martin Pike doing my recovery she still does not know if she can operate the bike and carry a model. Jim Paton has written a piece on electric bike recovery as he now is equipped with one.

I was sent a picture, possibly in response to my request for old pics, of Joe Northrop releasing his Jaguar in times gone by. Having only the one picture I supplemented it with a couple more from my archive to fill a page.

Bill Dean's book of balsa models has an all balsa box-kite which I thought some of you might build if only to keep wind strength low. We all know the wind does not blow when you want it.

The 4th Area comp at Barkston was a non-event for me, I was knackered from my birthday bash the evening before and relaxed in my chair and followed the fortunes of Phil Ball.

Dick Twomey, from the distant Isle of Mauritius, sends his latest article from the 'Weekly' paper detailing the flight of Alcock & Brown across the Atlantic, it being the 100 anniversary of this momentous achievement.

Andrew Crisp informs us of the goings on at the Oxford Dreaming Spires event and I publish his hand written report. It has more character than a simple typed report.

Peter Hall follows up with the Southern Coupe League activities at the same event, in what is becoming his special humoristic style of commentary. Roy Vaughn wraps up the event with the result table and the current league standings.

I dig again into my paperback Clarion articles from 2003, still indoor oriented continuing with a bit on wall foam models and a couple of vintage plans.

Jim Paton regretfully informs us of the death of his flying companion Ted Tyson.

Roy Tiller our archivist continues his reports with observations on the contents of the Model Aircraft magazine of May 1950. He also has a couple more 'Famous Firsts' pages.

Models powered by little Co2 canisters are the subject of Nick Peppiatt's article this month. I have never heard of these and wonder how the canisters are punctured with the correct sized hole for a decent burst of speed and reasonable duration. I have experience of Co2 capsules in competition air-pistols and if you make an error in installation there is one very short whoosh!! and its empty.

Gavin Manion writes his first in the series he promised on vintage coupes. Jumping III is the model featured and Gavin provides a simple plan and a bit of history to boot.

Our Secretary Roger Newman is tail-end-charlie with his monthly report on meetings and drone legislation. He is hoping for a reasonable turnout at our first Wallop meeting, I trust us stalwarts will have attended in numbers.

One thing I would like thank contributors for, is that articles and reports are now turning up with a few photographs. A picture is worth a thousand words so they say but a decent dialogue to support the pics is also useful, need not be 1,000 words tho'.

Editor



Saturday May 25th RAF Barkston Heath, as can be guessed from the picture above, was a good day. I sit relaxing after completing my BMFA Rubber flights, Had two good maxes in the earlier part of the day but dipped out with a 2-05 in cold air later in the day. Trouble was it was the only good day, the wind practically blew your socks off on the Sunday and Monday with the exception of a couple of hours late on Monday. Periodic squalls of heavy rain also featured.

Here we go with a blow by blow report on my misdeeds. I assembled my BMFA Rubber model 0-4 and after a quick low turns comforter I set about winding for the first comp flight. At about $\frac{3}{4}$ turns, bang!!, the motor broke towards the rear and the blast tube shot out of the front of the model together with the writhing bulk of the motor. Damage to the fuselage was not great, tissue shredding all around the rear peg but no structural damage at that end and only one spacer gone at the front. I started cutting away the split tissue to repair but idleness took hold and I boxed the model for home repair.

Bright idea, I decided to use my ex John Wingate mini-vintage 'Cherokee' as I had made up a couple of motors based on a low turns test flight at Buckminster the week before. The eight strands of 3/16 pre-tensioned rubber only weighed 28gm so well in the 50gm limit. Time was wearing on so I dismissed any thoughts of a test flight, took the bull by the horns, and after consultation with my turns table, I went for broke (an old dragster phrase) and piled on 750 turns which was well within the tables suggestion.

I removed the model from the jig, set the tomy D/T and with Rachel on the watch and her new electric bike at the ready I moved out onto the field. However it transpired that I had over cooked the motor size and on launch the 'Cherokee' shot up like a rocket for about 100ft, then



helicopterized about with a few rolling aerobatics thrown in but lost no significant altitude and stabilised to climb on for an easy maximum.



Rachel did not get to use her new bike for recovery as Martin Pike ran off like a greyhound and did the retrieval. A drink of tea and a biscuit or two and I did a repeat performance, max number two with identical flight performance. Martin raced off for recovery again so Rachel's only electric excursions were visits to Control with the flight card and toilets.

It was about now that Martin went off to fly scale leaving us to keep an eye on Caitlin & Rory, his children.

Colin Shepherd was with us and he, timed by Rachel, made his first flight in BMFA Power using his 'Dixielander'. As an onlooker the flight looked absolute text book, strong climb to good altitude, neat transition and glide in good air. Not so, short overrun and failure to set the radio D/T lead to a 7min + flyaway at tremendous altitude. No Flight.

Later in the afternoon the sun disappeared and the air cooled down such that our 1066 chairman, in passing, commented that he bet I wished I had not waited. He won the bet and was proved correct as my third flight although identical in form to the first two did not do much more than two minutes. Chatting later he concluded that I had deliberately avoided the fly-off, and who was I to disagree.



In the evening Rachel, myself and the Pike family drove into Sleaford and ate in the Italian Restaurant in the square. Rachel & I had a bottle of wine and a couple of unpronounceable Italian dishes whilst Martin and the kids had the inevitable Pizzas.

The next two days, Sunday and Monday were blowouts as far as I was concerned.

My intention was to fly P30 on the Sunday but my model would not have survived in the wind of the day. I know Peter Watt's model broke whilst carrying.

Monday was even worse for wind and rain showers, perhaps storms might be a better description. Late Monday afternoon however the wind abated somewhat and there was a flurry of activity as contestants rushed to complete flights but I was deep in spectator mode by then and the thought of a hectic finish to the weekend did not appeal and, in any case, Rachel & I had another task to perform.

Colin Shepherd had returned home on Sunday evening and on Monday he received a phone call to inform him his model from Saturdays fly-away had been found by a farmer some five miles away from Barkston and had been passed to a local modeller who contacted Colin. This left Rachel and I with the task of making contact and retrieving the errant model.

After a phone call to the guardian of the model and armed with an address and post code we bid farewell to the 2019 FF Nationals and journeyed to the village of Osbournby to meet with Derek North the modeller who had taken charge of Colin's 'Dixielander'.



He took us into his large workshop which was chock full of radio models of all shapes and sizes, Derek was obviously a keen modeller and had been for some time. He informed us his sheep farming friend had found the 'Dixie' in one of his fields and knowing Derek was a modeller he handed it over for him to do the necessary. Any form of reward was firmly resisted.

Regret had been expressed by the farmer as it appeared one of his flock had tasted the 'Dixie' fin but damage was light.



Overall it was not the best FF Nationals for me but, having missed last years due to ill health, the one good day was worth the trip. Roll on next year.

John Andrews

Engine Analysis: Rivers 3.5 Silver Arrow - Aeromodeller Annual 1960-1

RIVERS 3.5 c.c. SILVER ARROW



Specification

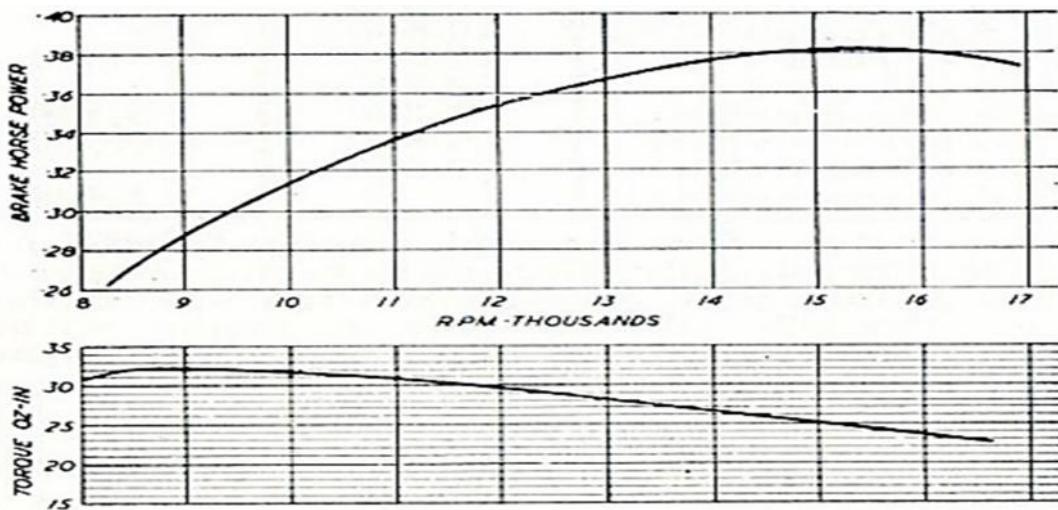
Displacement: 3.46 c.c. (211 cu. in.)
 Bore: .647 in.
 Stroke: .624 in.
 Weight: 7½ ounces
 Max. power: 382 B.H.P. at 15,500 r.p.m.
 Max. torque: 32 ounce-inches at 9,000 r.p.m.
 Power rating: 11 B.H.P. per c.c.
 Power/weight ratio: .054 B.H.P. per ounce.

Material Specification

Crankcase: light alloy gravity die casting
 Cylinder: hardened steel, stress relieved
 Cylinder jacket: dural, turned
 Piston: Meehanite, ground and honed
 Contra piston: Meehanite, ground and honed
 Crankshaft: 85-ton steel, hardened on journals, tempered on crank pin and threaded length
 Bearing sleeve: hardened steel
 Bearings: rollers (sleeve and rollers forming an integral twin roller race assembly)
 Connecting rod: DTD 363 dural
 Spray bar assembly: brass, 4 B.A.
 Prop. driver (hub): machined from dural
 Manufacturers:
 A. E. RIVERS LTD.,
 15 Maswell Park Road, Hounslow, Middlesex
 Price (including Purchase Tax): £6/5/8

PROPELLER—R.P.M. FIGURES	
Propeller dia. x pitch	r.p.m.
10 x 6 (Frog nylon)	10,200
9 x 6 (Frog nylon)	11,900
8 x 8 (Frog nylon)	9,200
8 x 6 (Frog nylon)	12,800
8 x 5 (Frog nylon)	13,600
12 x 4 (Trucut)	7,500
11 x 4 (Trucut)	9,400
10 x 8 (Trucut)	7,600
10 x 4 (Trucut)	10,000
9 x 4 (Trucut)	12,900
8 x 6 (Trucut)	12,100
8 x 4 (Trucut)	15,200
10 x 6 (Stant)	9,000
9 x 6 (Stant)	11,000
9 x 5 (Stant)	11,000
9 x 4 (Stant)	12,400
8 x 4 (Stant)	15,100

Test Fuel: Mercury No. 8
 AEROMODELLER Plans Service Power Coding "J"



I thought I might pen a few words about retrieving with electric bikes.

I bought a cheap folding one last summer as my ankle plays up and my energy levels have dropped. It's no use on Salisbury Plain but ideal on airfields.

My 8 ampere hour battery is insufficient for all day at Odiham or the nationals so I had to buy a second.

The bike does enable me to enter more classes. It has derailleur gears which get clogged up in the grass. The problem is less with a non-folding full sized bike.



There are bikes with modern Sturmey Archer type gears in the hub. This eliminates the grass clogging problem.

A box on the back is essential for avoiding folding wings. I find one with a lid easier than stuffing the model in the open rear end.

Other uses include trips to the control tent and the burger bar. After long flights it is useful for scouring the countryside to get a tracker signal.

If I was buying again I would get a full size off road with hub gears and a throttle that can be disabled for road use. The throttle is not road legal here in U.K. & power is limited to 250 watts, but there are higher powered bikes out there that can be switched to 250w.



Rachel's folding velocipede



Phil Ball's fixed frame flyer



Extract from Model Aircraft January 1951, his first epistle.

Slope soaring is becoming very popular.
Understandably so, since it ensures "peak" performance.

Wakefield Topics

The much coveted Wakefield Cup, being won on two successive occasions by models using a return gear system, has prompted certain progressive elements in this country to experiment with this old new idea. Having seen something of the elaborate gadgetry, the exhausting winding of two large, squirming motors, and the constructional ingenuity required to keep the total weight down to a reasonable level, I can only recommend the gear system to any singular individual possessing the patience of Job, the arm of Popeye, and the inventive genius of Heath Robinson.

Of course, the gear idea has its opponents, who are apt critically to refer to the amount of friction set up. This would seem to occur mainly between the winder and his helper.

Speaking of Wakefields, I recently sneaked in upon a preview of a model straight from the stocks of one of our leading exponents. This model, which seemed about as solid as the Rock of Gibraltar and as streamlined as Betty Grable, weighed approximately 8.00001 oz. The power was in the region of two strands of a quarter flat about a hundred yards long, and would absorb umpteen thousand turns, it had a climb like a flying saucer late for some interstellar appointment, and would only come down when spoken to in the kindest terms.

This is in direct contrast with our own Wakefield design—filched from all the best plans. As robust as six-pennyworth of Candy Floss, with an all up weight of 14 oz., this monstrosity will only reluctantly rise a few feet under the stimulus of twenty strands of quarter, and is more given to stalling than a politician.

Still, why should I worry when I can always blame it on to "fatigued" rubber.

From the winds of the North comes again the moan that the Southern bogs enjoy all the best of this climate's paltry allotment of fine weather:

*Men from the clouded Northlands raw
Marvelled at the sight they saw
A huge and fiery ball on high
Above the cloudless Fairlop sky,
And there they stood and gazed in awe
They'd never seen the sun before!*

Model Olympics

Hot on the trail of recent rumours that the next Olympics will feature certain model aircraft events, our Sporting correspondent, Al Rounder,—known as the "Man They Can't Gag". probably because of his receding chin—has managed to snoop out the proposed programme. All events will, of course, proceed from a flying start.

<i>Javelin Throwing</i>	<i>A hand launched contest with this popular engine.</i>
<i>Relay Race</i>	<i>R/C around the circuit.</i>
<i>Cross Country Marathon</i>	<i>Includes all free flight events.</i>
<i>Shooting the Line</i>	<i>Open event for club bores.</i>
<i>Flicking the Prop,</i>	<i>The only event which will finish at the start.</i>
<i>Hop, Skip & Jump</i>	<i>Run in conjunction with previous event. best performances being obtained with a damaged finger.</i>

A Jaguar or Two

Editor

Joe Northrop : Here is a picture of my Jaguar being released for take-off at Middle Wallop.



Spencer Willis launches from the Wallop take-off board, way back



Editor at Wallop 2008



The 'Jaguar' is not the easiest of models to sit in the winding jig. If you have a front support bar of some sort the distinctive keel on the Jag's belly gets in the way. Shown here is the editor's solution to the problem. Bung it on upside down.

Editor

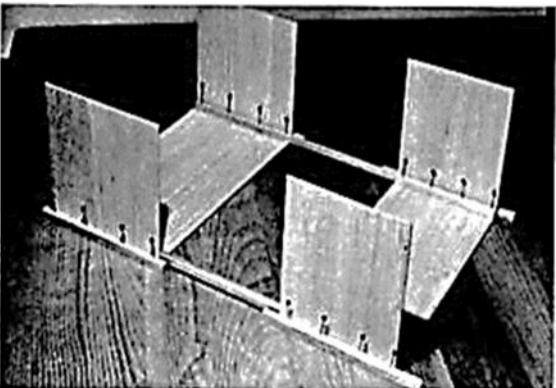
Box Kite & Glider

Bill Dean

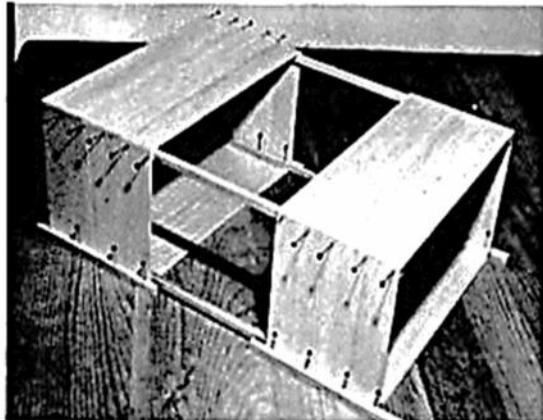
Extract from Bill Dean's "Book of Balsa Models".



Begin assembly by cementing and pinning two of the $\frac{1}{8}$ " square \times $13\frac{1}{2}$ " spars on top of the horizontal sheet panels.



Cement vertical sheet panels to outside of horizontal frame—holding in place with scrap strip until dry.



Check side panels are upright, then cement the second horizontal frame between them—level with top edges.

CUMULUS

ALL-BALSA 1½-OUNCE BOX KITE

BUILDING TIME: 3 HOURS

ALTHOUGH a more advanced type than the one featured in the last couple of pages, the *Cumulus* kite is very easy to build—the 'box' framework being quite rigid without the aid of internal bracing.

1. Start by cutting the $\frac{1}{16}$ -in. sheet panels from medium (M) 3-in. wide balsa (join $1\frac{1}{2}$ -in. pieces edge-to-edge). Cut two pieces to the length indicated for the combined 'A-B' pattern, then separate 'A' from 'B' along the dotted line. Cut four 'C' pieces.

2. The 'A1', 'B1' and 'C1' parts are the same width as 'A', 'B' and 'C', but longer—as indicated on the plan. Cut two 'A1-B1' pieces, then separate 'A1' from 'B1'. Cut four 'C1' pieces.

3. Mark which-is-which, then join these 16 pieces of sheet together in pairs, edge-to-edge and flat on the building board—'A' to 'C', 'B' to 'C', 'A1' to 'C1' and 'B1' to 'C1' (refer to plan). Cut four $13\frac{1}{2}$ -in. long spars from $\frac{1}{8}$ -in. square medium (M) strip.

4. Begin the assembly by cementing two of the spars to one of the 'A1-C1' and one of the 'B1-C1' horizontal panels (flush with edges). Repeat the process with the other spars and horizontal panels. Next, cement the 'A-C' and 'B-C' vertical panels to the sides of the first horizontal frame—holding in place with scrap $\frac{1}{8}$ -in. square strip and checking for correct alignment.

5. Complete the 'box' by cementing the second horizontal frame between the vertical panels—level with the top edges. Cement the two take-off skids (E) in place.

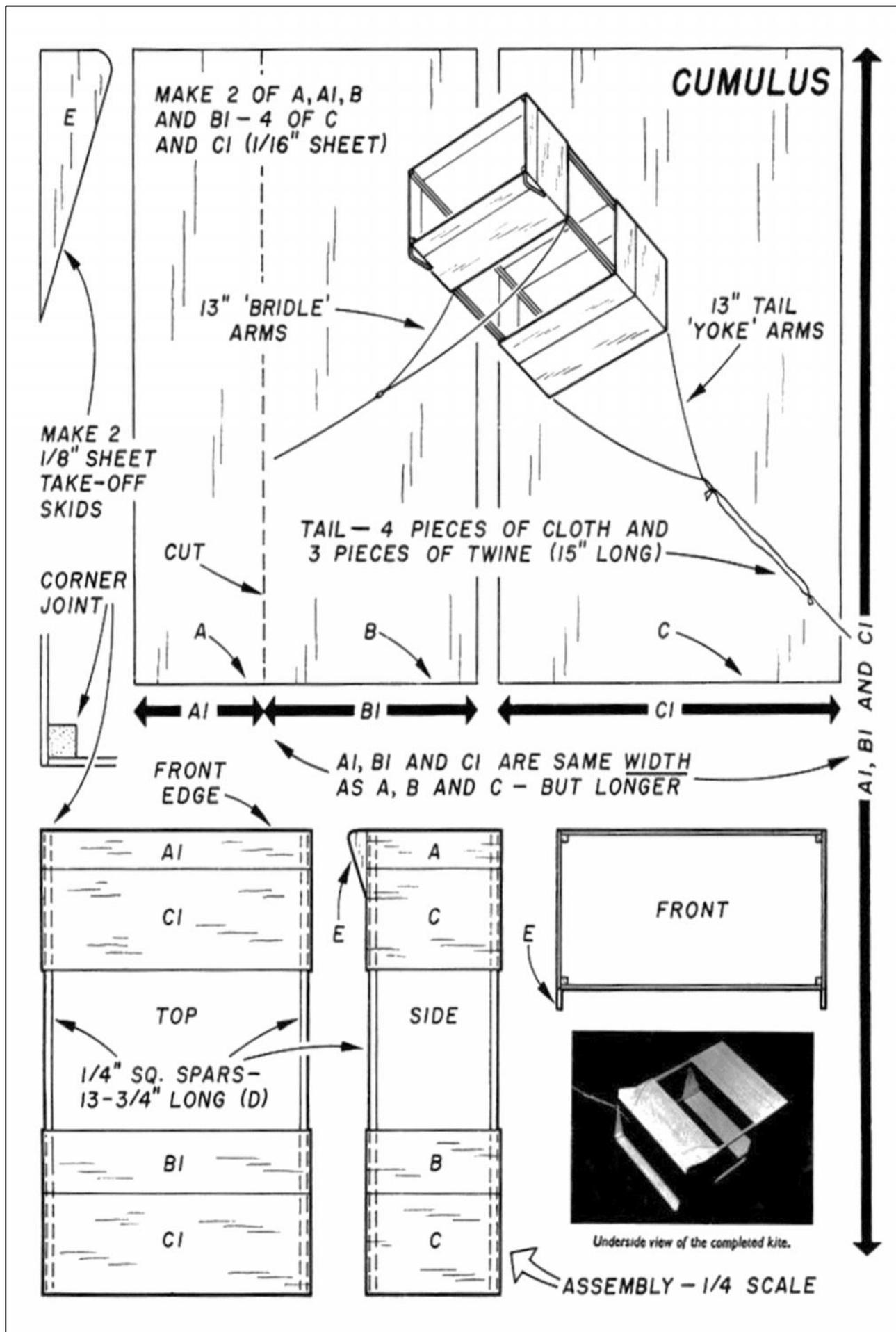
6. Knot a 1-in. loop in a piece of twine and tie the ends to the lower spars (behind A-C panels), so that each 'bridle' arm is 13 in. long. A tail is not normally needed, but in very rough conditions, a shortened version of the type used with the *Cirrus* (previous page) may be fitted for a greater margin of stability. See plan for details.

FLYING

Use 250 ft. of strong fishing line for flying and either hand launch or take off from the ground by means of the 'skids'. A good way of absorbing the sudden stresses caused by heavy gusts of wind, is to add 6 ft. of $\frac{1}{8}$ in. flat model aircraft rubber to the 'ground end' of the kite line.

MATERIAL LIST

Sheet (2)— $\frac{1}{16}$ " \times 3" \times 36" (M)	Sheet— $\frac{1}{16}$ " \times 3" \times 19" (M)
Strip (2)—1" sq. \times 36" (M)	Scrap pieces of $\frac{1}{8}$ " sheet
4 pieces of $1\frac{1}{2}$ " \times 15" cloth	Scrap pieces of $\frac{1}{8}$ " square
Length of fishing line	
TOTAL COST: About \$1.10	



DART KITE-LAUNCHED MIDGET GLIDER

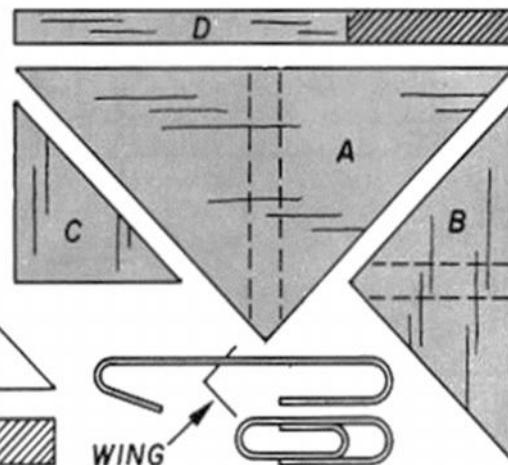
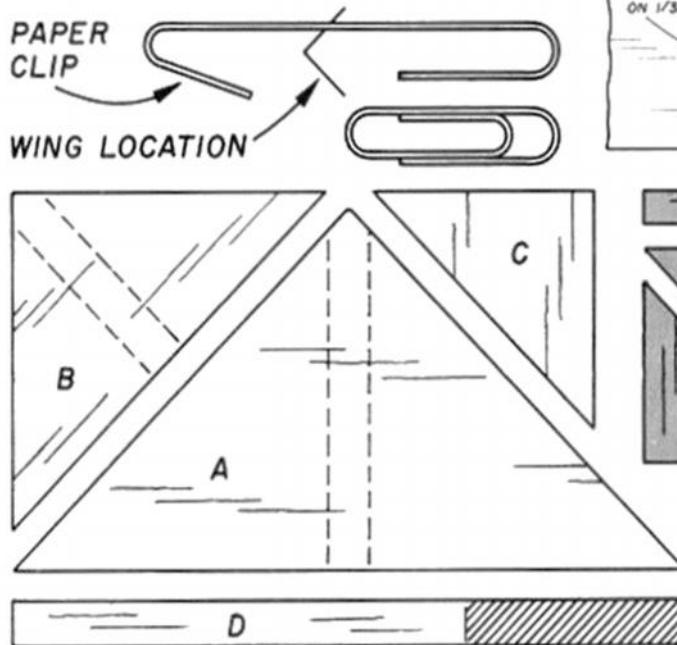
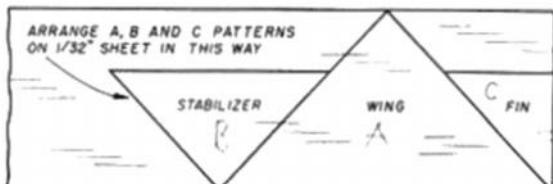
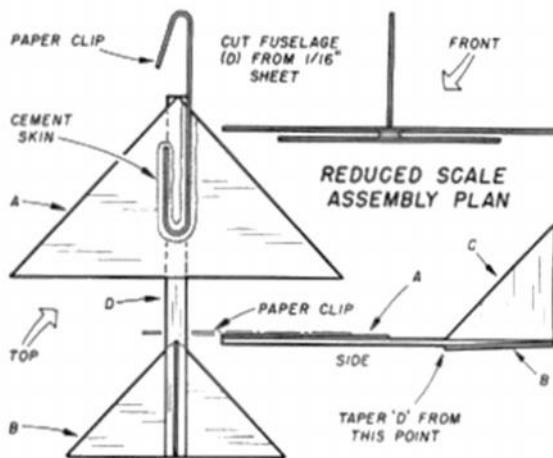
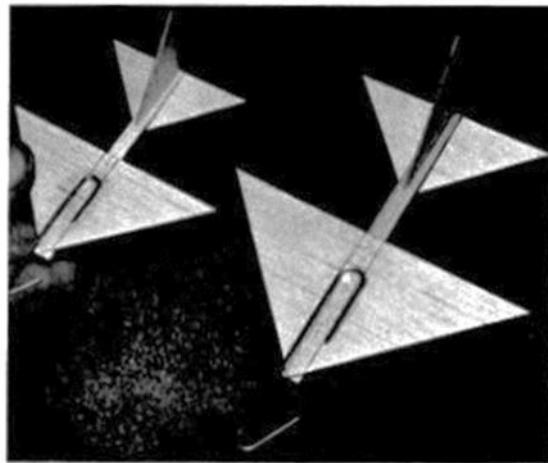
BUILDING TIME IS MINUTES

THESE little kite-launched models cost only a few cents to make—patterns being provided for both 4-in. span (on left) and 3-in. span (on right—shaded) versions, to suit either large or small size paper clips. Cut out the four parts (A, B, C and D) from medium (M) sheet, then pencil the fuselage (D) location on the wing (A) and stabilizer (B). Taper the rear underside of the fuselage (C) as indicated by cross-shading.

Cement the wing *on top* of the fuselage, with pencil lines uppermost—then follow with the stabilizer (*underneath*), with the pencil lines again uppermost. Attach fin (C) to stabilizer, checking alignment. Finally, open up the inside 'U' portion of the paper clip, bend to shape—and cement on top of the wing.

Test glide from shoulder height (indoors), correcting a dive by adding a drop of cement to the tail—or a 'stall' by cement on the nose. Correct a steep turn with a *small* dab of cement on the *outside* wing tip.

Tie a 1-in. loop in the kite line near the 'bridle' and get your helper to hook on the *Dart* before releasing the kite. When the kite is well up, a jerk on the line will shake the model free and allow it to glide back to earth.





The weather forecast for RAF Barkston Heath, the venue for the Midland Area 4th Area contest on Sunday June 9th, had been pretty grim earlier in the preceding week but was changing each day. In the event, the day turned out to be one of the best flying days this year with light winds and sunshine and threatened showers passing over as a couple of black clouds without precipitation.

Trouble was, I had been at my family birthday party the night before in a local Chinese Restaurant celebrating my 86th birthday and Rachel and I were somewhat lacking in enthusiasm for the event. We decided to attend for a breath of fresh air and I threw a model box into the car in case I might want to compete. When we arrived at the airfield the modellers were scattered about in three separate groups, I picked one and settled down to see which way models were drifting. After a while I decided I ought to put something together so I assembled my repaired O-4 BMFA Rubber model and found the propeller fold not to my liking. I rehashed the prop fold stop and moving the screw started to delaminate the nose-block spigot. I had a quick low turns check flight. It was useless, dropping its left wing whilst climbing right and stalling down. Rachel was asleep in the car by now so I staggered off to recover the model, puffing and blowing all the way with a few stops on the way back. I did not make a positive decision not to enter but sat in my chair and soon was in spectator mode.

Phil Ball moved from one of the other groups and settled alongside us, so I had a front row seat at his onslaught on F1B. First up he buttonholed Rachel for timekeeping duties then set about breaking motors.

Unfortunately he blew the contest on his first flight, his launch was certainly far from ideal and height gain was poor. The model settled down in indifferent air and was just about holding its own when boof! the D/T went and he was down in 1-39.

Phil's model is equipped with the latest in electronic wizardry, I heard him explaining the wonders of it to Rachel. Records altitude reached, estimates by interpolation the probable flight time without D/T, has three independent rudder adjustments and all sorts of other data that can be downloaded (it's rumoured it can make a cup of tea). Having said all that, he was left scratching his sunburned nut as to why the D/T function had dropped him out of the sky so early. He claimed lack of concentration due to a piss-up the night before.





Phil Ball fiddling with one of his many rudder settings



Phil grits his teeth whilst he winds then nervously removes the wound motor & ½ tube loading stick from the jig.

He managed to break a couple of motors, but much to my annoyance he did not finish up in a heap on the floor. He claims to be able to hear the strands failing before the actual break occurs. The rubber he was using was a little inconsistent, although from the same batch, he had a significant difference in winder turns on two motors, 78 winder turns on one and 83 on the other. After his initial clanger he managed to comfortably complete his last 4 flights as maximums.

Recovery on his electric bike looked easy, he rode across the grass initially without any apparent difficulty, one handed at times. Should give Rachel confidence when she eventually uses her bike in anger, which will be at Middle Wallop on Saturday 29th June in the SAM1066 return to roots event.



Phil studies the meters for thermals whilst Rachel looks downwind to see what he's just missed.

A few random pictures of unidentified flyers who were within camera shot as I spectated away from my comfortable chair.



The last couple were somewhat distant. The power flyers are Pete Watson and crew, Pete is obscured. He had a rough day, stuck in two electric models. One full power into peri-track, the other from top of climb into the road.

John Andrews

Dick's article published in the Mauritius 'Weekly' magazine

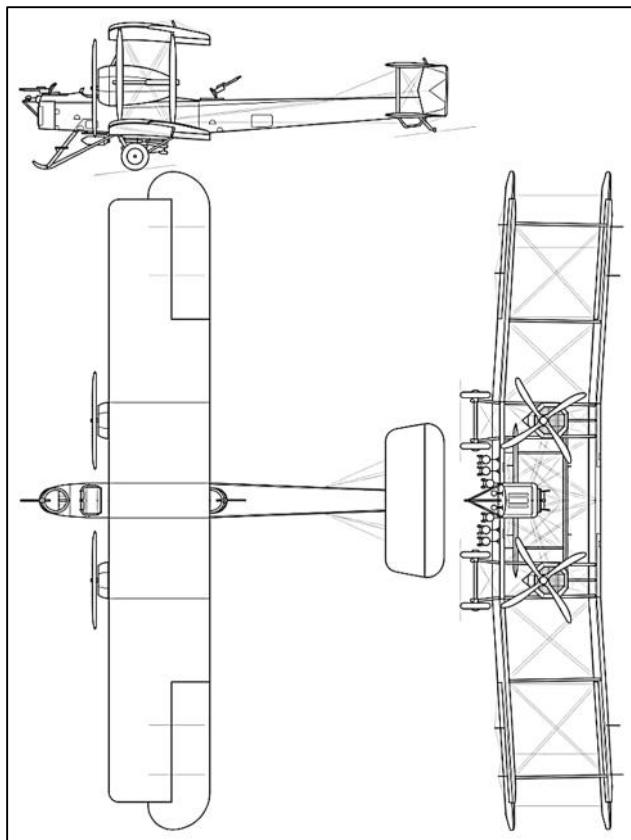
"With immense courage Brown climbed out onto the lower wings, making his way precariously to each engine in turn to chip away the ice until the motors ran smoothly again"



Dick Twomey,
The Aeronautical
Society of
Mauritius.

Trans-Atlantic Flight Centenary

June 14/15th this year marks One Hundred years since two pioneer aviators from Britain won a 10,000 pound prize for being "the first to fly across the Atlantic Ocean in less than 72 consecutive hours", as the rules had stipulated. The competition had been organized by the Daily Mail newspaper, and I find it surprising that such a daunting challenge was issued as early as 1913, which – as all the world knows – was only 10 years after the famous first powered hop made by Orville and Wilbur Wright's flimsy biplane creation on 17 December 1903. That historic flight in Arizona had achieved a distance of less than 100 feet, (about the equivalent of the wingspan of an Air Mauritius Airbus A319) – and suddenly the aviation fraternity was being challenged to cross 3,000 kilometers of unfriendly ocean!



Specifications:	
Vickers F.B.27 Vimy	
Dimensions:	
Wing span:	68 ft 1 in (20.75 m)
Length:	43 ft 7 in (13.28 m)
Height:	15 ft 8 in (4.77 m)
Weights:	
Empty:	7,104 lb (3,222 kg)
Max. Takeoff Weight:	10,884 lb (4,937 kg)
Performance:	
Maximum Speed:	100 mph (161 km/h)
Service Ceiling:	7,000 ft (2,134 m)
Range:	900 miles (1,448 km)
Powerplant:	
Two 360 hp (268 kW) Rolls-Royce Eagle VIII V-12 liquid-cooled engines.	
Armament:	
(Typically) Four .303 caliber Vickers machine guns. Bombs load 4,804 lb (2,179 kg)	

As history relates, several teams had prepared to enter this race, and in June 1919 two contenders from Britain found themselves at the same time in Newfoundland, from where they would takeoff: Jack Alcock and Teddy Brown for the Vickers entry, a converted Vimy bomber; and a Handley Page team led by Mark Kerr. While Kerr was making yet another test flight the Vickers pair decided to take off. In reducing their preparation time they had taken additional risks in what would in any case be a dangerous adventure, as the challenges encountered during this 16 hour flight would later bear witness. After only four and a half hours of flight the Vimy's wind-driven electrical generator failed, leaving Alcock and Brown with neither power for their radio nor for their 'heated' flying suits. If you recall that the aircraft of that era featured open cockpits, you will begin to appreciate the need for heating to counteract the chilling effect of a constant 100 mph 'wind' – produced by the aircraft's flying speed.

In reducing their preparation time, they had taken additional risks in what would in any case be a dangerous adventure, as the challenges encountered during this 16-hour flight would later bear witness

The weather became the next problem, for the Vimy was not equipped to fly for long periods in cloud, and without gyroscopic instruments Alcock was several times unable to maintain his intended straight and level flight, coming dangerously near to plunging the aircraft into the unfriendly sea.

This was not all: Next, because of unexpectedly cloudy weather, these intrepid gentlemen had to deal with ice which formed on the wings and began to choke the engine intakes. With immense courage, Brown climbed out onto the lower wings, making his way precariously to each engine in turn to chip away the ice until the motors ran smoothly again. Meanwhile the same ice was forming over the ailerons, (the control surfaces for lateral control), which became heavy and almost impossible for Alcock to move. Is it any wonder that - after many hours of battling with the elements -- these two heroes could not contain their excitement and relief when the grey silhouette of Ireland at long last appeared on the horizon! Crossing the Connemara coastline near the town of Clifden they soon spotted a clear green flat area and elected to land the Vickers Vimy there, only to discover that they had picked the surface of very wet bog, which tripped up the aircraft so that - in ungainly fashion - its nosed over. But they had done it! The less than graceful arrival took nothing from the greatness of their achievement, and John ('Jack') Alcock and Arthur ('Teddy') Brown were treated, quite correctly you will agree, as the heroes they undoubtedly were. A short time later the two boys from Manchester (football fans please note) were knighted by King George V, honours well deserved.



John Alcock



Arthur Brown

A couple of real
British Heroes

Dick Twomey
President
Aeronautical Society of Mauritius

(Editor: from the look of the two portraits I unearthed, the two would appear to have different personalities)

Port Meadow, Oxford 2nd June 2019

Two thirds of the Nationals was a fight against wind and rain. A week later, half of the Dreaming Spires Free Flight Gala was the same. The morning was half decent — a modest wind from the south swinging west, deteriorating into a soggy afternoon with turbulence from the riverside trees, and difficult retrievals from railway line and canal for those who hit big thermals. There was some surprisingly strong lift despite the rain.

Over the years the 'Oxford Comp' has had some notable visitors from abroad — France, Italy, New Zealand (Paul Lagan). This year we were honoured by the presence of Ukraine's Vasilly Bechashny who impressively won FIH with his L.D.A bunter. He had a good trip to our shores, getting 1st in Open Glider and 2nd in FIH at the previous weekend's Nats.

As ever, Sam speaks columnist Andrew Longhurst displayed his brand of professionalism, winning P30, Mini-Vintage Rubber, with a full house from his rarely modelled Comet Skyrocket, and Hi-start Glider (which saw more action than is usual) with his scaled-down Corsair A/2 glider.

In F1G Garm Manion flew like a Southern Coupe League leader, beating long-time Oxford rally supporter, Don Thomson into 2nd place. Garm flew his first four flights using his Etienne vintage job, single blade prop and all, then finished off with a deliberate early D/T flight from his rear-fin design published in the 2014 Freeflight Forum.

J.H.L.G. saw some close competition despite the soaking the models and fliers got, and was a triumph for youth over age. Twelve year old Charlotte Brewer outflew her father with a consistent set of flights which showed good recovery from the catapult launch into a stable glide. Leo Miller at 3rd. was equally impressive, and even younger. Sandwiched twix these two upstarts was Ant Knights (considerably older!) who flew a model built by the organiser, and even made a max on one occasion.

One of the features of Dreaming Spires events has been the Scale competition. This year was disappointing with only three entries coming forward, the result giving Bill Dennis yet another win in this demanding category which is judged on stand-off realism, construction and quality of flight. Bill's rubber powered Jungmann coped admirably with the wind and turbulence.

We seemed to have been plagued with inclement-weather events this year with consequent lowering of standards. In some cases, merely completing your flights will give you a "podium placing".

As an organiser, observer and occasional competitor, I would say that it is all down to attitude and trimming. Maybe lack of places to practice on gives rise to the "well it was all right last time" mentality. Gliders don't have to be circled before launch if this gives a strong possibility of getting you into trouble. The style and angle of release of a rubber or power should be the same every time. You could practice in the mirror!

Andrew Crisp 12th June 2019

Oxford Gala, June 2nd 2019
Fourth Round Southern Coupe League

Today is the first of June and tomorrow is the Oxford Gala. All week the forecasts have been unpromising. I feel a bit of doggerel coming on.....

To go or not to go ?
 That is the question for me.
 The Met Office is pessimistic,
 The B.B.C. says maybe?

If I don't go I know I'll be sorry,
 If I do it's likely to rain,
 And the wind is a brisk southwesterly,
 And we'll be out of the field again.

The weathermen may have it wrong though,
 Michael Fish's mistake comes to mind.
 But this time instead of a cyclone
 The weather could turn out to be kind.

We could all bask in glorious sunshine,
 Every flight an easy max.
 And at lunchtime enjoy all our picnics,
 And in flowery Portmeadow relax.

I'm definitely going to go now,
 It's a special occasion for me,
 It's a Southern Coupe League competition
 And I'm flying my best F1G.

But what if it's really bad weather
 And I break or lose my best coupe,
 And get soaked when trying to retrieve it
 And go down with pneumonia or croup ?

The motorway's sure to be busy
 And what if my car breaks down,
 What if I run out of petrol
 And it's miles to the nearest town?

Better to stay safe at home then,
 And keep my powder dry,
 And wait 'til the weather is perfect,
 And there isn't a cloud in the sky.

The weathermen may have it wrong though,
 We could all bask in glorious sun,
 I'm definitely going to go now
 I don't want to miss all the fun.

But what if it's really bad weather....

(Repeat)

I did go and the southwesterly got really frisky by midday. John White, Ben Hobbs, Alan Brocklehurst and Gavin Manion were all blown out of the field despite the ninety second max. Ben landed in the canal, John, Alan and Gavin are still looking. The rain came in at about three o'clock but it didn't stop Gavin and Don Thompson from completing the five flights to take first and second place. Ray Elliot 's model was out of trim and he took two attempts at his first flight, but the competition was less than intense and he took third place. Rex Oldridge starting late, maxed his first but then decided to save his legs and his model. Peter Hall flew his 'Oxford Special' - a locked-down-tip-up-wing-and-tail-comes-down-very-quickly coupe, but folded the wing walking back. There were plenty of boomers and some violent turbulence from the trees on the river bank so delicate highly strung coupes were not favored. Six flew their own designs, Rex, a Bagatelle and Gavin an Etievre, all tissue and balsa, no carbon, and two used fuse D.T's. - these need the operator to have extra-sensory thermal detection ability to get the timing right.

Dreaming Spires is a unique event. The twenty-first century is left in the car park and we trek across the meadow to the 1950's. No phones, no drones only tented contentment and cake - there's always Mrs. Crisp's cake, some only come for the cake. Some bring the bare necessities, some like Mr; and Mrs Wright bring their sofas (see photo). Long may it continue.

Gavin Manion tops the league table after four rounds, the next event is at the Southern Gala on Salisbury Plain on August 18th.

Oxford Gala, Coupe Pictorial



Alan Brocklehurst



Don Thompson



Winner: Gavin Manion



Ray Elliott



A relaxed Rex Oldridge



Even more relaxed Mr & Mrs Wright with their sofa

Peter Hall

Southern Coupe League Rd.4

-

Roy Vaughn

Oxford Rally, Round 4 Results, Southern Coupe League						
	Entrant	Club	Maxes	Score	Time	Flyoff
1	G.Manion	Birmingham	3	15	7.18	
2	D.Thomson	Croydon	3	12	6.46	
3	B.Hobbs	Oxford	2	10	3.00	
4	P.Hall	Crookham	1	8	2.48	
5	R.Elliott	Croydon	0	6	2.22	
6	J.White	Croydon	1	6	1.30	
7	R.Oldridge	C/M	1	5	1.30	
8	A.Brocklehurst	B&W	1	4	1.30	

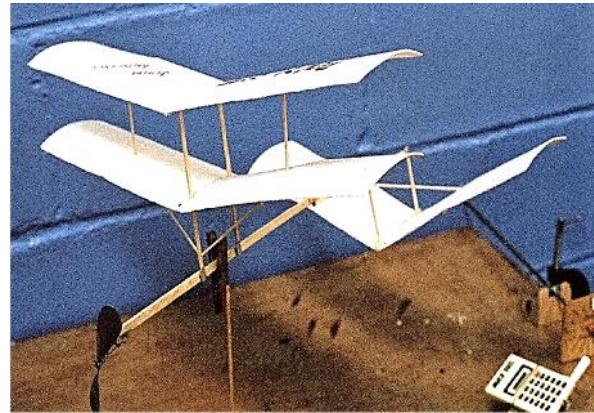
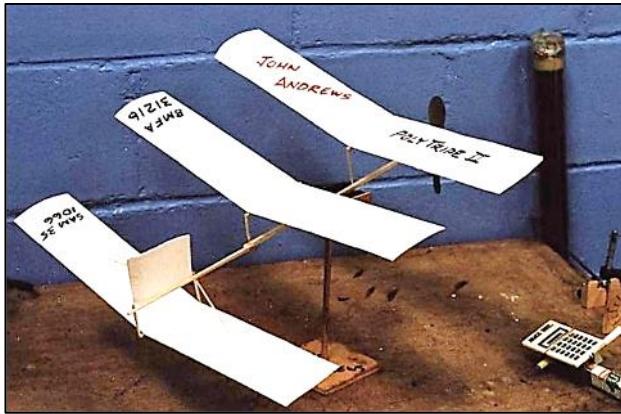
Southern Coupe league: Positions after Round 4											
Position	Entrant	Club	Coupe De Brum	First Area	Odham	Oxford Rally	Southern Gala	Crookham Gala	London Gala	Coupe Europa	Total
1	G. Manion	Birmingham	3		15	15					33
2	D. Thomson	Croydon			11	12					23
3	P. Hall	Crookham			12	8					20
4	A. Moorhouse	Vikings	8	9							17
5	P. Ball	Grantham	14								14
6	S. Willis	Croydon		12							12
7	B. Hobbs	Oxford			1	10					11
8	W. Dennis	MFFG	10								10
=	A. Brocklehurst	B&W			6	4					10
10	C. Foster	Morley	9								9
11	P. Uden	Crookham		8							8
=	J. Paton	Crookham			8						8
13	R. Vaughn	Crookham			7						7
14	M. Marshall	Impington	6								6
=	R. Elliott	Croydon				6					6
=	J. White	Croydon				6					6
17	M. Benns		5								5
=	C. Redrup	Crookham			5						5
=	R. Oldridge	C/M				5					5
20	P. Woodhouse	Morley	4								4
21	K. Taylor	E.Grinstead			3						3
22	E. Challis	Crookham			2						2
23	R. Tiller	Bournemouth									0

Roy Vaughn

Extract from the old paperback *Clarion* of 2003

John Andrews - Goes Indoors - Part 4

Here we are again, I'm really on a roll now; could be the excitement generated by this new computer I'm using. Before I move on I refer you back to last issue when I buried you in the delights of polystyrene wall-foam.

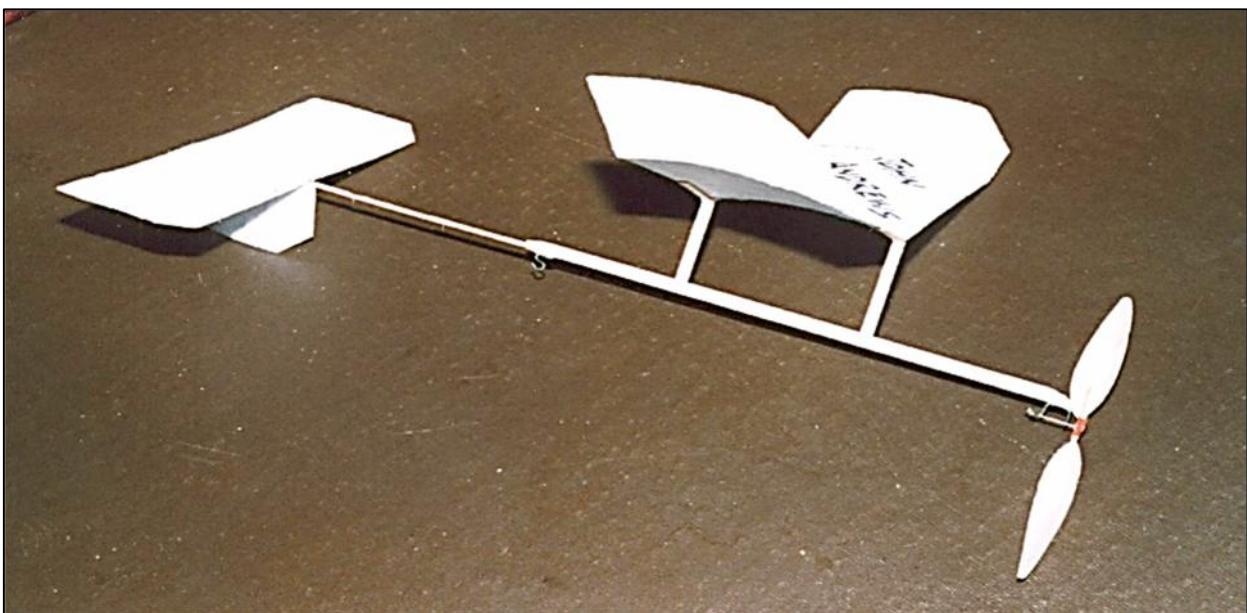


Here are a couple of variations to the norm you could have a go at

If you recall I expressed interest in the *Foam 200* plan that I had come across and in particular the unsupported wing construction.

Up to that time all my foam wings had one wing rib in each half and wing braces back to the wing posts for support. My later models have only one wing brace each side from the front wing post to the wing rib centre unlike the Poly-Rat described and pictured with double wing braces.

I'm a simplicity man, I build parallel wing chords, rectangular fuselages 'cos tapers and ellipses bring me out in a cold sweat. The *Foam 200* plan with no wing ribs or wing braces was my kind of model so I cut up some foam and built a 10-inch polyhedral wing. The glue joints at the breaks retained the aerofoil curve and the wing seemed quite stiff. I mounted the wing on a fuselage stick $3/16 \times 3/32 \times 8$ inches long with tail feathers on $5\frac{1}{2}$ inch long $\times 1/16^{\text{th}}$ square boom. I used a 6-inch diameter prop from one of my old living room stick models but I think it could stand a bigger prop than that. The airframe weight came out surprisingly light at 2.5 gms which was quite acceptable.



Small Foamy described above and named 10/3 (that's the wing size)

I took 10/3 to Cradley Heath to one of the Birmingham gangs Sunday evening meets for its first outing. Not knowing what rubber to use I guessed a $.070 \times 12$ inch loop and wound a thousand or so turns on for the first test flight. John Boy had blown it again. Off goes 10/3 like a scalded cat, climbing at about 45 deg. straight up to the roof banging about in the rafters until the bits sprinkled down to the floor. Wing and motor stick followed by boom and tail-plane followed by one half of the prop. I retired to lick my wounds then out with the cyno.

With 10/3 back in one piece and a new motor reduced to .040, a quick test flight proved OK. A couple of thousand turns or so and up she goes again, 2min 24secs, not bad for its third flight. I'll increase the wingspan to 12 inches next time. Mind you I thought I had already made it 12ins but I must have been working in the middle of my 24 inch ruler and made it 11 inches, which is typical of my precision engineering. After shaping the dihedral joints and setting the angles the final result was 10 inches wingspan. I might get it right next time then I'll build a few more to see how big I can go before the wings distort in flight.

Vintage. Information on vintage indoor seems a little sparse but David managed to root through his archives and dig up a book by Ron Warring titled 'Indoor Flying Models' published in 1946. Ron, as we all know, was a prolific writer on all things modelling, you name it and Ron will have written about it.

The content seems to confirm the feeling that I expressed in last month's epistle to you 1066'ers that immediately post war indoor flying was principally done round the pole. The book lists the S.M.A.E. rules for round the pole flying at that time. There were two classes:

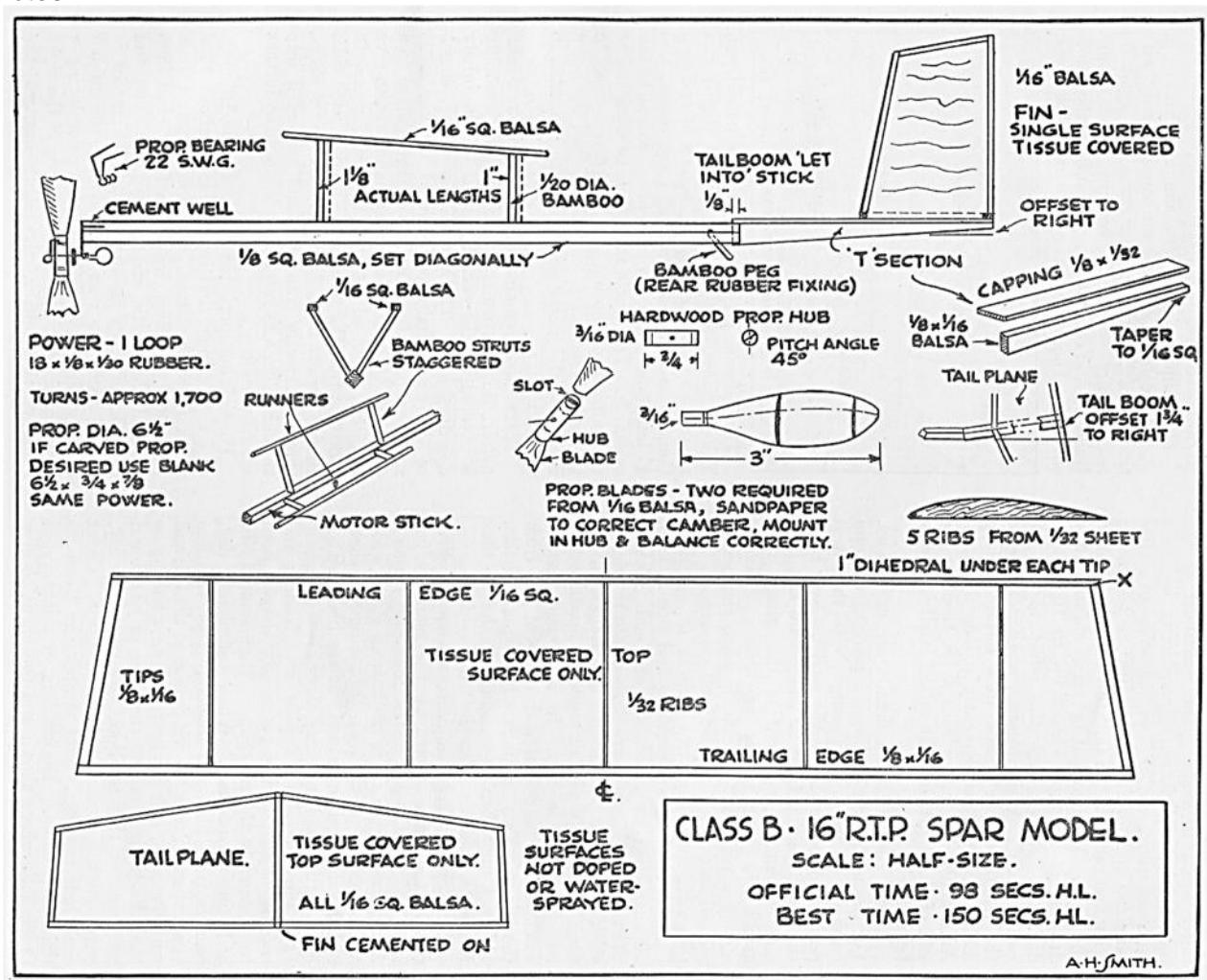
Class 'A' maximum weight 2ozs with a 6ft. Pole and flown on a 12ft. Line

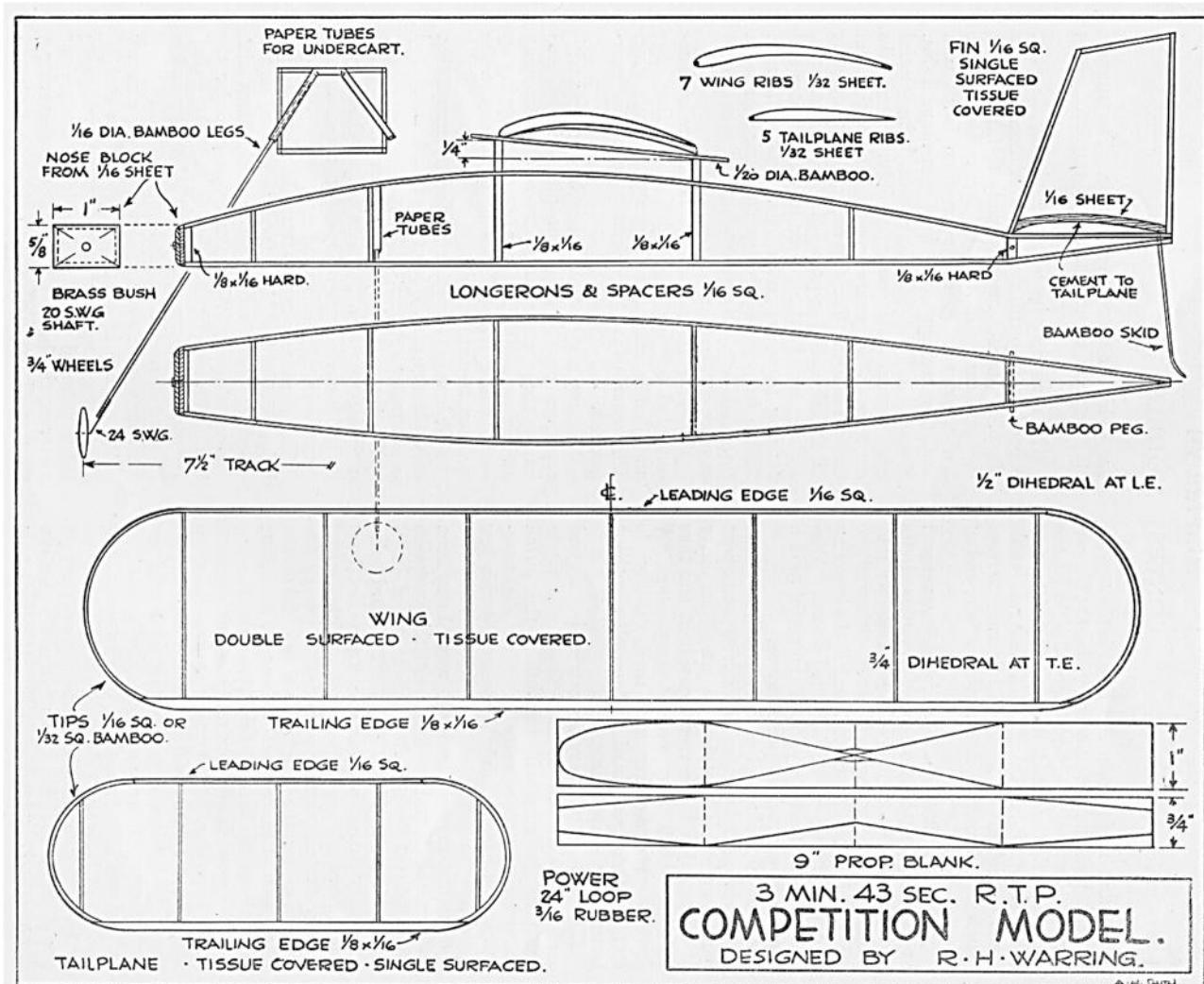
Class 'B' maximum weight 1oz with a 3ft-6in Pole and flown on a 6ft. Line

I have had a quick flick through the current B.M.F.A. Contest Rules Record Book but round the pole flying seems to have disappeared.

In the early days models were tissue covered and recorded flights of two minutes plus. If David can find room for them there will be two plans somewhere near this article. The book also mentions speed models doing around 30mph; they must have been interesting on 6ft. of cotton. The book also cites models being flown in small rooms on 3ft. lines

One of the main benefits of indoor RTP at that time was the camaraderie fostered within the clubs through their regular club nights and also inter-club competitions. Ron relates one amusing incident at a club night where he had been invited to give a lecture on RTP, he had written in his notes that outdoor models gave spectacular results RTP indoors but never durations of more than a minute. On his arrival at the meeting he was treated to a demonstration by an RTP Wakefield model which was doing flights of 74 seconds. Needless to say Ron smartly modified that section of his notes.



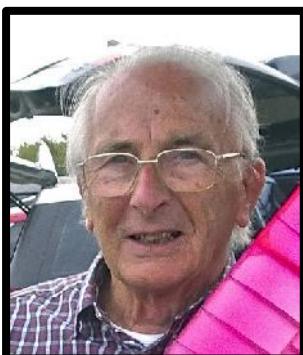


Scale approx. 9mm to the inch
Plans from 'Indoor Flying Models 1946'
By R.H.Warring

This article must be something of a record for me; I don't seem to have digressed at all. OOPS! I've just received April's CLARION, on reading my missive to the afflicted in that issue I note my clanger on page 12 re yoghurt pot prop blades. Should read 10 & 15 degrees sloping left to right from tip to root. Back next time with a bit more on indoor free-flight and Wilco's food bag covering.

John Andrews

Aeromodeller Departed: Ted Tyson



Ted Tyson:

Jim Paton reports;

A best friend Ted Tyson died yesterday June 11th. I visited him last week in hospital. We joined up at Salisbury Plain most weekends for trimming and competing. He was a bit confused when I saw him so I don't know the medical details. He looked and felt terrible. Not the Ted I knew.

He always was a pleasure to fly with and to chat to when we were too tired to retrieve. Regards. Jim Paton

R.I.P.

Report No. 101 A break from Meccano part 2.

A look at Model Aircraft magazine for May 1950 which includes "More Famous Firsts" but before we get to that here is the cover and other extracts which I hope will prove of interest.

You may notice that the cover of this magazine is torn right across the front. If you can supply a good condition copy of this issue, or even the cover, please get in touch.

"Cover Story" tells us that the picture was taken at Fairlop Aerodrome during the London Area Ripmax Trophy event and shows C. Hawkes of the Battersea & District M.A.C. about to launch his Rudderbug. The KeilKraft advert, not to be outdone, included mention of their Falcon winning the Ripmax Trophy.

★★ The FALCON does it again!

WINS THE
RIPMAX TROPHY

with E.C.C. Radio Control Unit

For the last result in R/C build a Falcon and fit with E.C.C. equipment.
FALCON KIT PRICE 1950 ... 117/-
E.C.C. R/C OUTFIT Complete ... 69/- 19.0
Receiver only 42/- 10.0 Transmitter 45/- 19.0
Espresso 11.5

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Manufactured by E. KEIL & CO. LTD., LONDON, E2
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engines, JETEX motors are now ELMAR & BAT Accessories,
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*A new model
with 3 WINNING
FEATURES!*

1. TIP-UP TAIL D/T
2. AUTO RUDDER
3. PLUG-IN WINGS

1
2
3

*Your dealer will be pleased
to show it to you*

The CHIEF A-2 GLIDER
DESIGNED BY BILL DEAN

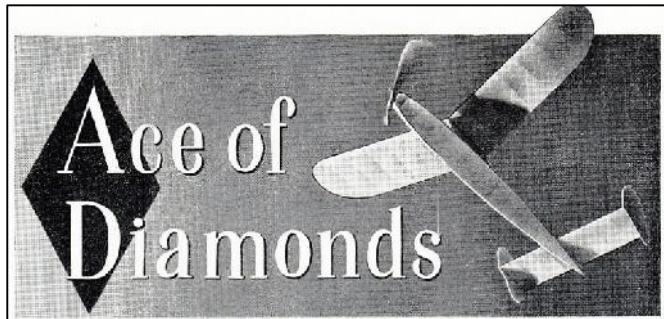
Diamonds by SAM 1066 member Dick Twomey, the Heston A.O.P. by M. M. Gates, Howard's Hatchet by J. A. Howard and a Minicoupe by Vic Dubery.

"Over the Counter" provided a buyer's guide to glider kits including a list of seventy kits "which have enjoyed considerable popularity" and gave favourable reviews (Were they not always favourable?) to the Halifax Roma, Mercury Norseman and KeilKraft Chief, the last commenting "Gadgetry includes an auto-rudder and dethermaliser tip-up tail."

The KeilKraft advert gave these features a more positive twist.

The plans in this issue were the Ace of

Flying grounds were under threat, just the grounds, not the very principal of flying a model aeroplane, we had it good in those days.



THE FLYING GROUND QUESTION

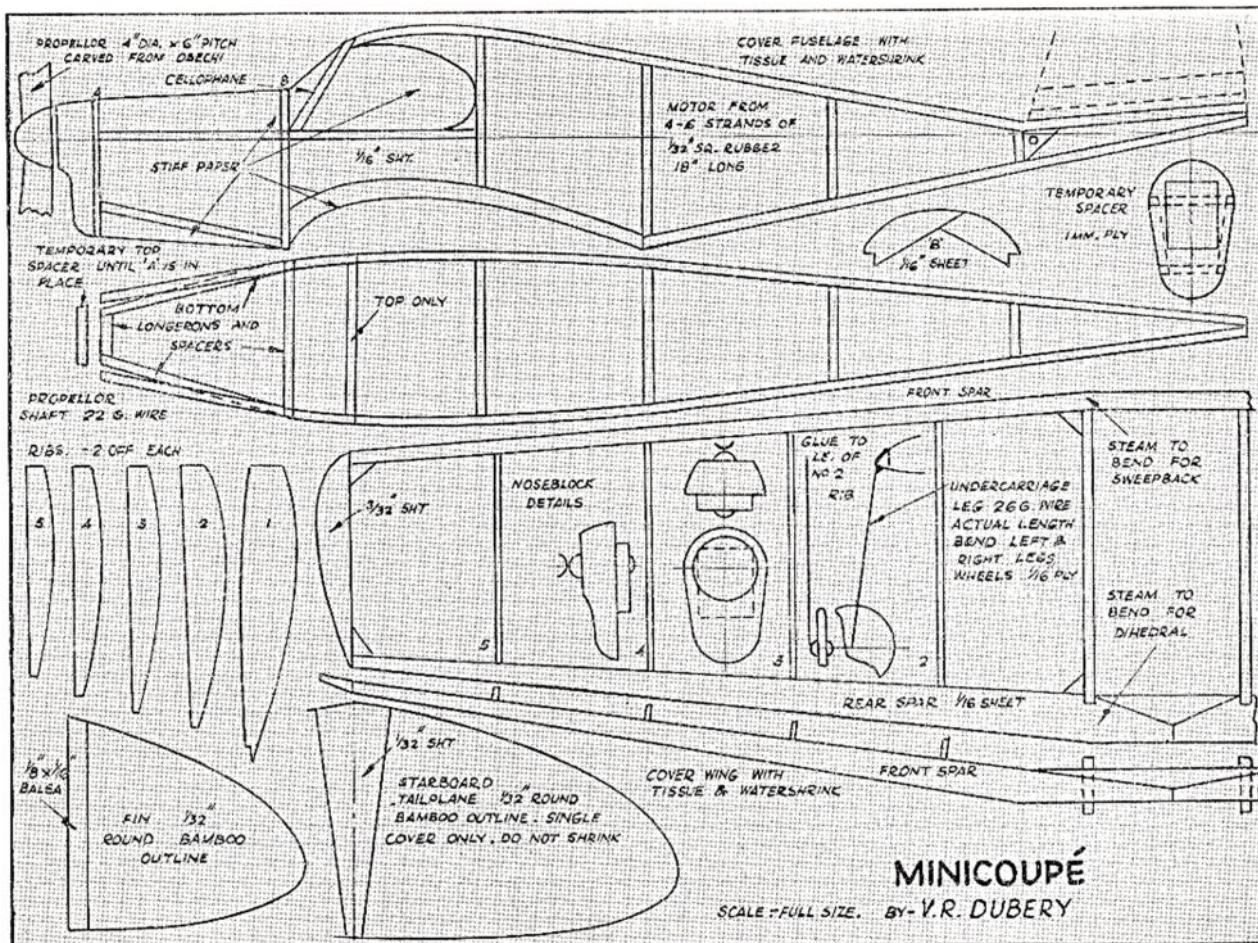
The situation concerning flying grounds is becoming decidedly difficult in many districts and there have been one or two cases recently, where local authorities have taken much stronger action than they are entitled to under the terms of the recent directive issued by the Home Office.

In their directive, the Home Office make it quite clear that the object of the powers given to local authorities concerning the establishment of bylaws regulating the flying of model aircraft on public open spaces is not to *prevent* model flying, but to ensure *safe* flying.

Quite a number of local council members and officials appear to ignore this aspect altogether and completely ban the flying of models on the public open spaces under their control on the slightest pretext and without adequate reason.

It is extraordinary how a perfectly plain and straightforward document can be misread or ignored altogether by persons holding responsible positions and one is often led to wonder how much is wilfully misread or overlooked.

Any club which has suffered in this direction should immediately inform the S.M.A.E. so that suitable representations can be made in the right quarters.



Now to the Famous Firsts which concluded as follows,

MORE FAMOUS FIRSTS

Plug-in Undercarriage—The simple bamboo leg plugging into paper tubes in the fuselage was certainly used by Gordon Light in 1934 and incorporated in his 1935 Wakefield winner. R. N. Bullock used a similar plug-in undercarriage on his 1936 streamliner. T. Newall (founder member of the S.M.A.E.) invented the wire undercarriage, popular on Wakefields *circa* 1939.

Rear Peg—Prior to 1936-7, almost without exception a hook was used as a rear rubber anchorage. It is difficult to trace who first thought of using a bamboo peg to replace this hook, but almost certainly it was the outcome of the invention of the bobbin. This little detail is now accepted the world over.

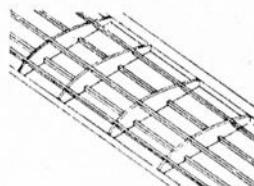
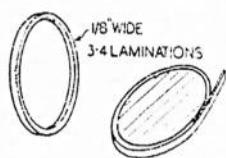
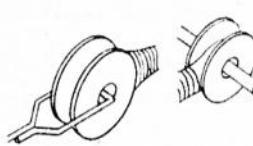
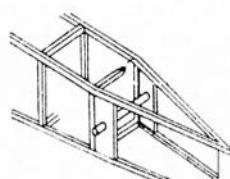
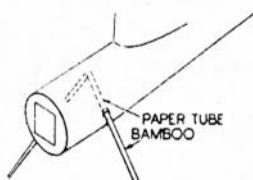
Tensioned Motors—Were almost unknown until the mid-1930's, motors being made up equal to the distance between hooks with no slack. Longer motors meant more turns and once a form of tensioning was introduced became universal. First tensioners were mechanical—and of form used today with folding propellers—and originated in this country. A further scheme—cording—was later introduced by H. E. White, corded motors now being the general rule for all rubber models with free-wheeling propellers.

Stretch Winding—To increase possible turns was undoubtedly an American innovation. They, too, believed in stretching to the limit—some six times the motor length before putting on turns. Stretch winding was general in this country by about 1935.

Bobbins—Another little detail for eliminating motor troubles, were introduced by C. A. Rippon and comprise one of the simplest and most useful accessories ever made available to rubber modellers.

On the structural side of rubber models, some of the major developments are:—

Wound Formers—For streamlined fuselages, replacing the heavier, weak laminated sheet bulk-heads. Introduced by C. A. Rippon, who made the first of 1 mm. ply. Were found more rigid and considerably lighter wound from balsa, Bob



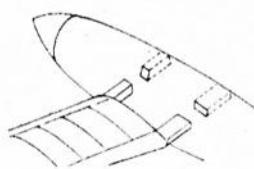
Copland being the first to use this material.

Sparless Wings—Which have proved so popular, were first used by R. N. Bullock.

Multi-Spar Wings—Originated in the Cleveland club, U.S.A., with either Korda or Lanzo, or both.

Plug-in Wings—Of the sparless type below, again by R. N. Bullock.

Tongue-and-Box Wings—Have been fairly generally used, but an early outstanding example is Bob Copland's G.B.3.



which finally made the shoulder-wing, monospar wing a practical proposition.

Anti-spin Fins—Are another outcome of the development of the streamlined slabsider, again by Ron Warring. Outrigged fins as on Copland's earlier G.B.3 were used to increase directional stability.

Hubless Wheels—For a final cleaning-up of the undercarriage of a streamliner were first used by R. N. Bullock.

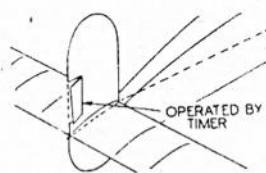
Free - wheeling Propellers—Were in general use in the early 1930's and examples can be traced back to 1914.

Folding Propellers—Are really an American development, first coming into use around 1937. Cahill was certainly one of the first contest fliers to standardise on this type, although Roy Marquardt appears to have been the true originator. One of the earliest examples of folding propellers seen in this country was by Henerey of T.M.A.C.

Downthrust—Was invented by the late Charles Burchell about 1924.

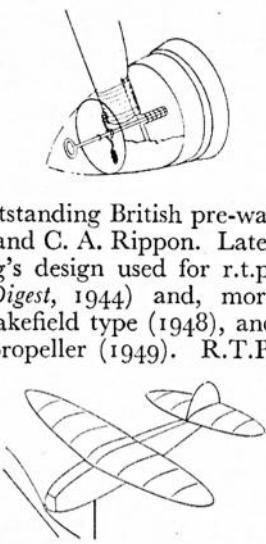
Dethermalisers—Were used first by Dick Korda, in the form of a timer-operated tab on the fin to spin the model down. In this country, Norman Lees was first to use a D/T, employing the same principle, but making his own special lightweight airdraulic timer. Ron Warring appears to have been the first to suggest and drag test a parachute. Bob Copland the first to use a chute. All the early

D/T's of these types were timer - operated. The b.p.-up time dethermaliser now being applied to rubber models, was first used by Carl Goldberg on a power duration model—the *Interceptor*.



Fuses—Were in use in America by 1942, but first clubs in this country to standardise and perfect this method were Croydon and Bushey Park.

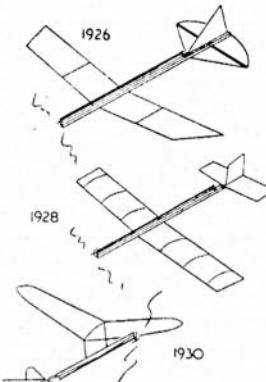
Variable Pitch Propellers—Have been talked about for many years, the earliest generally appearing in the form of a suggested layout in a magazine article. There is still no "standard" type for model work, although some of the pre-war Continental Wakefields used them. Outstanding British pre-war examples were by Henerey and C. A. Rippon. Later types include Ron Warring's design used for r.t.p. work (*Model Aeronautical Digest*, 1944) and, more recently, Bob Copland's Wakefield type (1948), and E. W. Evans's feathering propeller (1949). R.T.P. model origin must again be credited to R. N. Bullock and some highlights in the development of this type are:—



First three minute flight, Ron Warring (1939); first three minute flight (standard S.M.A.E. rules), K. Young (1941); first four minute flight, Bob Copland (1944); first five minute flight, Ronnie Rock (1946).

First electric powered r.t.p. model which type subsequently became popular for exhibition work.

Microfilm Covered Surfaces—Were used for the first time on r.t.p. models by Bob Copland, although a contemporary American magazine article shows that they had similarly tried an all-microfilm covered r.t.p. fuselage model.



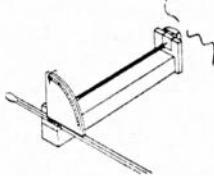
Microfilm itself was first used by Kittel in 1931 and marked a big step in the development of the indoor free flight duration model. Leading developments in indoor free flight were:—Cambered wings—McCoy, 1928. Hollow motor stick—1928, followed by polyhedral wings.

Parasol wing mounting—came into general use during 1930-1.

Microfilm-covered propellers—1935.

Torque Testing—As applied to rubber motors was probably first used prior to the 1914-18 war, but

the now standard type of torque tester as used for testing contest motors was the work of the 1939 Wakefield team, notably A. F. Houlberg and Bob Copland. Copland and Warring both used the method for r.t.p. models, 1939-40 (getting out very accurate graphs of duration of flight against turns for different motors) and these two are still probably the leading exponents of rubber tests by such methods. C. A. Rippon devised and demonstrated a torque tester with an electrically-reading scale, 1940-41.



Glider Launching—By line and dropping hook was invented and demonstrated by Messrs. Paveley and Rippon in the early days of the S.M.A.E.

Offset Towhooks—Used widely on gliders for obtaining a straight tow with rubber offset were originally introduced by Frank Zaic.

Auto - rudder—A later development where the rudder is hinged and connected to a pivoted tow-hook to give straight rudder for tow and offset rudder for free flight was originally the work of Ron Warring, with a contemporary and similar, yet independent, development by R. F. L. Gosling (1942-3).

Rudder Lock—The ultimate form of auto-rudder with positive action was produced by Ron Warring (1945).

Laminar Flow Wings—First on glider models, and then later applied to rubber and power models, were first developed by N. K. Walker and R. H. Annenberg, founders of the L.S.A.R.A. These mathematically-derived wing sections form the subject of a British patent.

MODEL SAILPLANE DESIGN

by P. R. Payne

Illustrated 3s net

This book, written by one who is well known to the more serious-minded followers of the craft, explains contemporary advances and presents the essential information in such a manner as to eliminate, by the liberal use of nomograms, all need for the employment of slide rules or complicated formulae. A book for the true enthusiast regardless of the type of model in which his interest may lie.

PUBLISHED BY PERCIVAL MARSHALL

Next month, the rebirth of Meccano Magazine.

Who is the new publisher? Answers on a post it note.

Roy Tiller, tel 01202 511309, email roy.tiller@ntlworld.com

Roy Tiller

CO₂ Capsule Propelled Models

After my last CO₂ article IIFE 26 (December New Clarion), Roy Tiller kindly interrogated his databases to see whether there was anything more on the Brown Micro-Jet, but he did not find anything. He did, however, find some interesting stuff on CO₂ capsule propulsion, in similar manner to the Speedjet also described in the December NC. So this month I am going to explore one of aeromodelling's cul-de-sacs.

The subjects this month are not really indoor, although I suppose, following our esteemed editor's descriptions of his indoor Jetex flying exploits last month, this would not be impossible!

A TWIN-JET-PROPELLED FREE-FLIGHT OR CONTROL-LINE MODEL TO SUIT ANY BUILDER

• The author's sister with the completed product. Note fidelity to scale throughout model.

AIRACOMET by LAWRENCE EISENGER

30in wingspan twin CO₂ capsule powered model from Air Trails March 1946

One of the designs Roy found was the Airacomet shown above. At the beginning of the Air Trails article, the editor has a note : 'The use of CO₂ units to power this model is with the permission of Ray Models, which holds the patent rights for this type of propulsive power' In my last CO₂ article I wondered how the Speedjet was launched. I was then unaware of the existence of the Ray Gun, although as it had been mentioned in Roger Simmonds S35S columns, notably in Smoke Trails 11 (April 2007) and Smoke Trails 27 (March 2010), perhaps I should have been.

The Ray Gun was produced by Ray Models to pierce and launch CO₂ capsule powered models, but I have been unable to find a suitable photo or drawing to reproduce here. Ray Models produced kits for a number of such models from about 1944 and two kit boxes for the Jet-Racer and Jet-Wing are reproduced below. Further information on these can be found in Roger Simmonds articles.

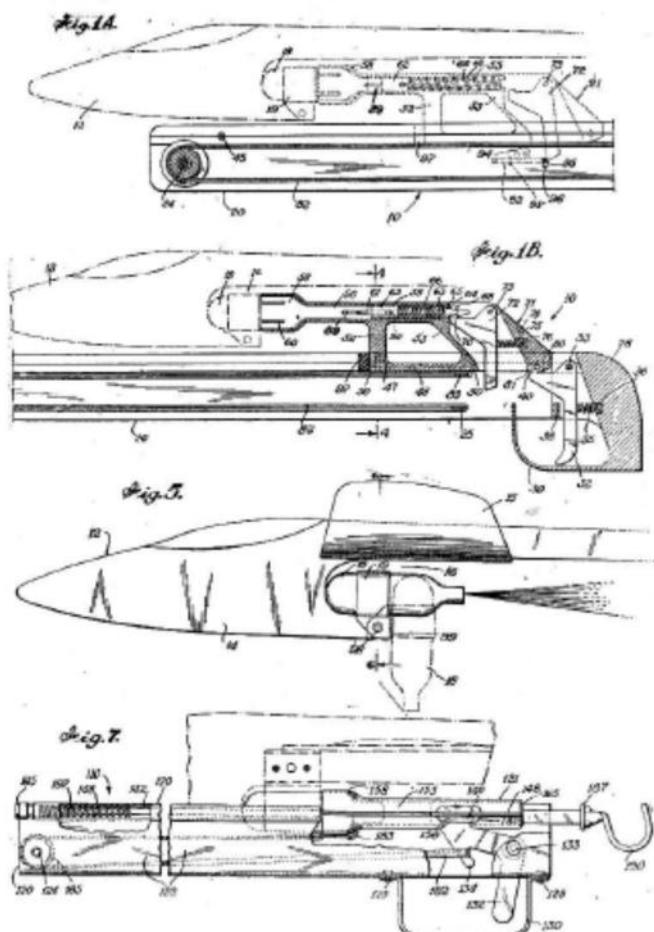




The Jet-Wing kit box from 1946 and the earlier Jet-Racer from Ray Models

IMPORTANT PATENTS

U.S.A. No. 2,860,620 W. L. Effinger, Jr.
APPLICATION DATE 15/2/56

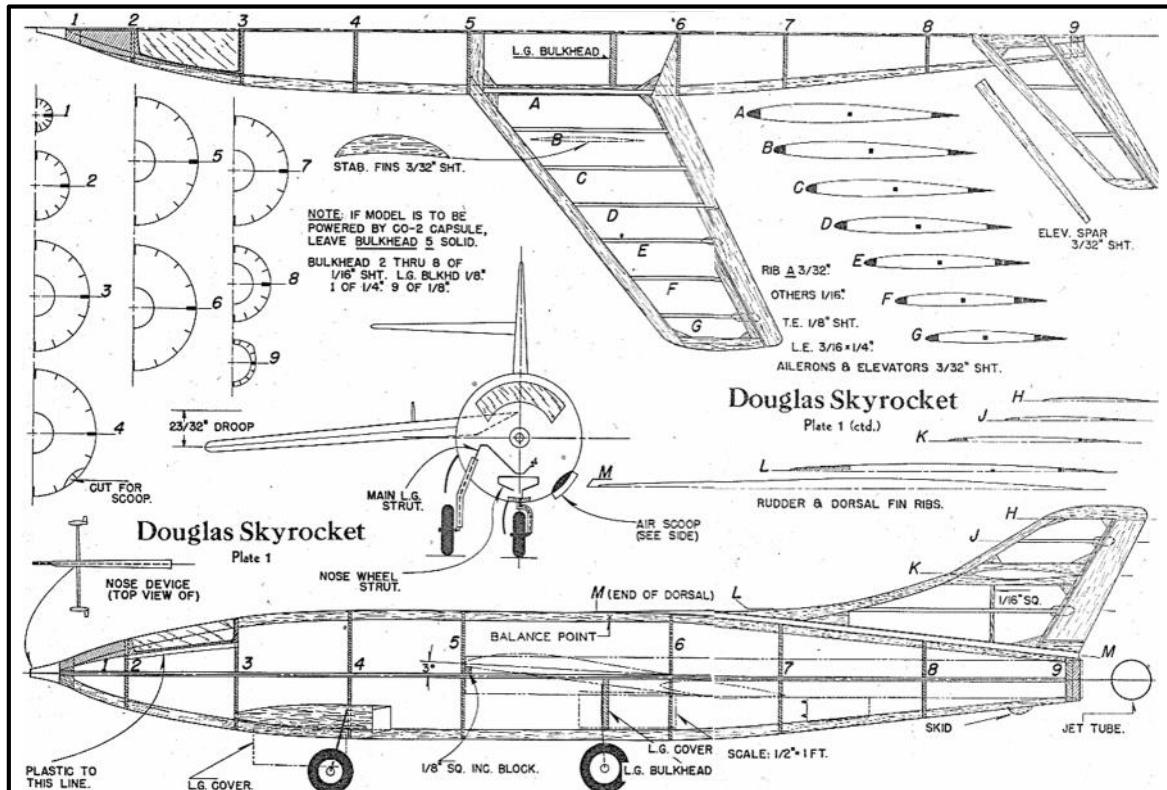


An interesting combined catapult and firing pin for CO₂ powered models by the renowned President of Berkeley Models, U.S.A.

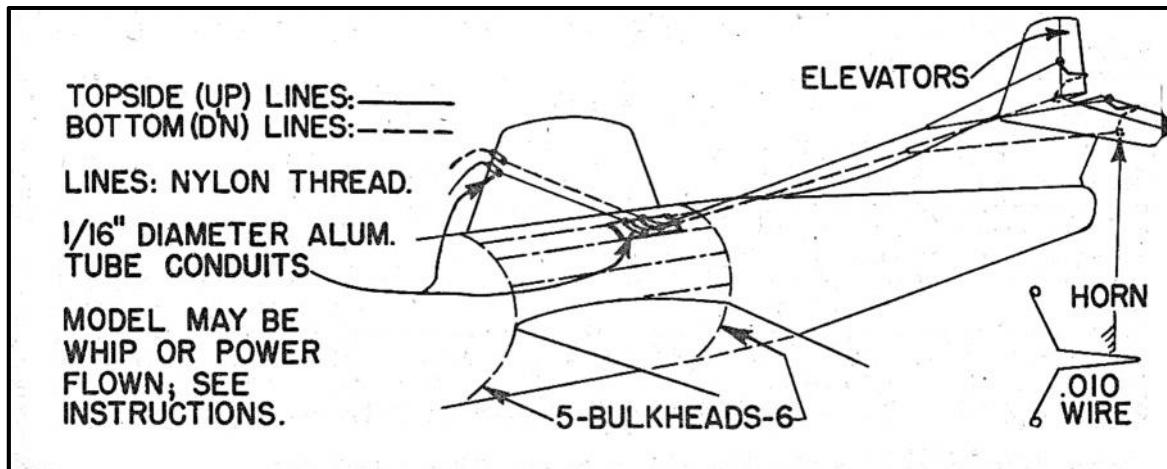
THIS INVENTION provides an ingenious catapult launching device for jet propelled model aircraft, more particularly, models propelled by CO₂ cartridges. The catapult vamp carries a spring urged carriage which includes in addition to aircraft supporting means, a capsule firing mechanism adapted to actuate the CO₂ cartridge immediately prior to separation of the aircraft from the carriage. Fig. 1B shows the catapult in the loaded condition with its cartridge firing pin in a rearward position while Fig. 1A shows the cartridge being fired by forward movement of the pin 89, etc., as the carriage approaches the end of its travel. Note how the thrust is transmitted from the carriage by the bell-mouthed thruster 58 and also how the cartridge, when expended is permitted to swing downwardly under its own weight and to fall clear of the airframe as in Fig. 5.

Important Patents from AeroModeller April 1959

I would imagine the Ray Gun firing device is similar to that shown Bill Effinger's patent, extracted from the April 1959 edition of AeroModeller, but without the added complication of the simultaneous catapult launch for the model. The Airacomet article describes a simultaneous piercing device for the twin capsules, using phonographic needles, and a trial and error procedure is given for adjusting and matching the resulting hole sizes in the pierced bulbs. This process must have used a lot of them. The model could be built for either free-flight or control-line on 20 foot lines. It is described as 'rather tricky to handle because of its rapid acceleration'. How many laps would it have done?



12.5 in wingspan Douglas Skyrocket Flying Models December 1948 by Joseph H Wherry



Proposed Skyrocket control system

The second design Roy found was Joseph H Wherry's Douglas Skyrocket, which is also a control-liner, but, having a single capsule, it is somewhat simpler than the Airacomet. There is no mention of Ray Models in the accompanying article, but near the end the following somewhat cryptic statements are made: -

'CO₂ capsules provide power. The capsule is easily removed but requires a firing gun with a handle extension added to fit down the long narrow tube. The model responds nicely to control - it can be whipped or power flown with equal ease'.

The jet tube was made from rolled paper.

So I can only assume that around 1950, when the Speedjet article and plan was published, the Ray Gun was not an uncommon device in the USA. Where are they all now?

Nick Peppiatt

"Jumping" a Vintage Coupe by Pierre Marrot. (Ref AAAA058, Oct 1998)

This, the first of a short series of vintage coupe plans, was going to be easy. There in the AAAA online library was a good plan and article by the designer of the unique (?) forward swept wing coupe Jumping II, the only thing missing was the prop diameter. Peter Tolhurst had a photo of it (see last month's Clarion) and I'd seen it in the flesh at the French coupe competition at Viabon in 2015.

Pete had already agreed to help and provide additional information from the Tolhurst archives, so I sent him what I had. "Aha", quoth he "that's not Jumping II, its Jumping III". Despite my protestations that the article in AAAA was by the model's designer and he ought to know, he assured me that he had a marked-up drawing from the hand of Marrott himself. "I'll tell you all", he said, "when we meet up at the Oxford do".

Hmmm I thought, I'd better do some checking. I knew that there was a small 3 view of Jumping II in various places including the 1977 Vol Libre Coupe Special, but I had tended to ignore it since it had no real detail and certainly no prop information. When I looked properly that Jumping II was very different from mine. Yes, a forward swept wing, but this time plug-in shoulder mounted and with a much bigger stab. So, there were at least two versions of Jumping and when I saw Pete at Oxford and discussed with him his marked-up copy it was clear that Marrott had indicated that there were in fact three.

Against this background, I'm happy to present Jumping III (as I'm fairly sure it should be called) as a valid Vintage Coupe principally because we have first-hand testament from its designer given the 65+years since it was originally flown. I've added as best I can the alterations and notes that Marrot made to the plan he gave to Pete Tolhurst. The origin of the plan is not clear though, it is surely not from the mid-1950s. It's French (see the number style) and it seems reasonable to assume that Marrot drew it to illustrate his 1998 article in AAAA. Why he should then decide to change it in his discussions with Pete Tolhurst I don't know, the "65+ years" maybe the best answer we can get.

The article with the plan in AAAA starts with the description of the antics of a group of French flyers and their plans to attend the 1998 Aeromodeller coupe competition (at Halton?) They arrived en-masse clearly intending to have a great time and show the English a thing or two. The Vintage winner on the day was Andre Rennesson flying his KIM design which will be featured later (and which, I now know from Pete Tolhurst, is also available in several versions - good grief not again!) Pierre Marrot used this his uniquely configured coupe to finish fourth. The bulk of the article is full of interesting trimming information though it's not at all easy to decipher. It seems that Marrot changed from right/left trim around 1997 citing too much drag, problems with a stall at prop fold or "too slow" a turn to the left. He wanted right/right but without auto-rudder and this required delicate adjustments with a Coupe (don't we all know that!) He chose to use the folded prop blade as a forward fin by offsetting it 10 - 15° on the left side of the fuselage. The blade folds against a stop on the fuselage visible on the drawing where the offset is indicated as 40mm. When I saw his model at Viabon there were thin ply shims to adjust the blade angle so he clearly used it as an active trimming aid. Free of the need to offset the rudders for glide the thrust can be set at 1° to 1°30' right to give 3 or 4 turns in the 30 second prop run

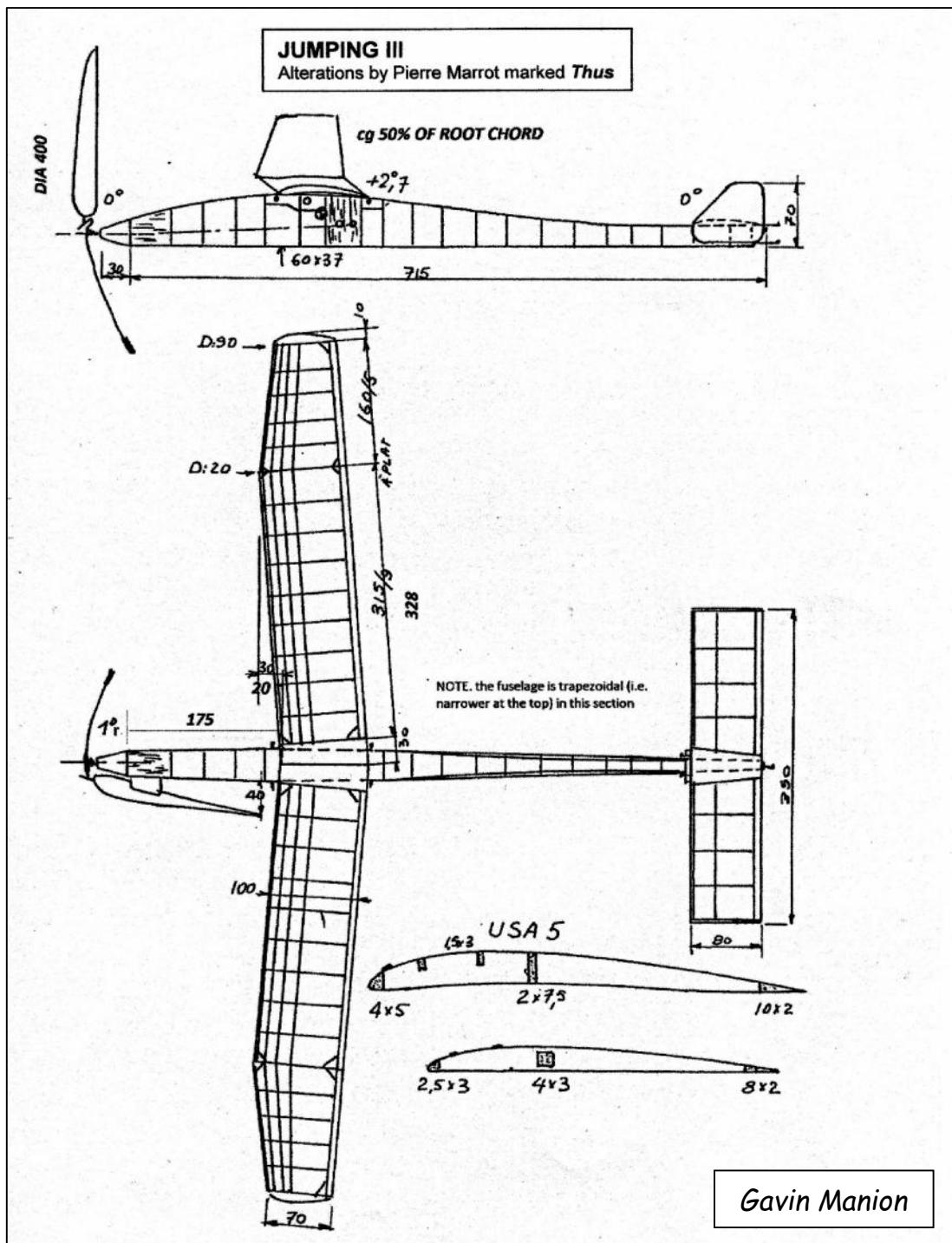
Marrot describes how to trim the glide by removing the prop blade and replacing its mass with a wrap of solder, and then adjusting the stab and rudders until the glide is long and straight or very slightly to the right. He then says the right glide turn from the prop blade can be set "to your own style"; in calm more open, in wind more tightly.

The wing, he says, should be "twisted". This can be achieved by 2mm washout at the left dihedral break, offsetting the whole wing by 1-3mm max (surely too little?) to the right or finally by using a 50mm long Gurney Flap from 1mmx8mm balsa wedge at the right dihedral break.

Regarding incidence Marrot seems to prefer to mount the wing at 2° with the stab at zero as he claims the climb is better throughout the prop run but the argument loses me as does his explanation of how the forward sweep on the wing makes use of the prop wash. For some things you need to be French (and an Aeromodeller) to understand!

So, there we have it, a pretty unique coupe which will definitely not be mistaken when in the air and with good performance in the hands of its designer over more than 60 years. Pierre Marrot was, at least until recently, a noted French F1C flyer so his advice should be carefully regarded. His use of the prop blade to give an auto-rudder effect without anything to "set" seems worthy of incorporation in other models, modern or vintage.

If you build Jumping III everyone will wish they had one!



By the time you read these notes & if the weather forecast is anything like reasonably correct, we should have held our first meeting back on Middle Wallop - hopefully a successful & modestly well attended day for all concerned.

All things being equal, it should allow us to look forward to our planned Cagnarata Day on 10th August. Ray Elliott has been busy in setting out an interesting schedule of classes for a single competition event. Have a look at what he has proposed:

'CAGNARATA' CONTEST 10th AUGUST

This contest format is popular in Italy and is basically an all-in event where models of different classes are flown against each other. We would like to stress that whilst a competition it is also a fun event and competitors are encouraged not to take it too seriously! It is also very much an experiment and we would welcome any feedback/comments. The concept is to encourage anyone who flies free flight to enter a low key contest & to enjoy their flying.

Differences in performance of the various classes are taken into account using a handicap system (K factors) with different maxes depending on the K factors. The classes to be flown with associated K factors and maxes are set out below. Each flight time is calculated by taking the actual flight time & multiplying it by the K factor.

<u>Classes</u>	<u>K Factor</u>	<u>Max (secs)</u>
E36	1	120
Mini Vintage Power	1	120
FIG / Vintage Coupe	1	120
F1H /A1	1	120
Mini Vintage Rubber	1	120
Open Vintage / Classic Glider	1	120
P30	4/3	90
E30	4/3	90
CO2	4/3	90
Under 25in Vintage Rubber	3/2	80
Hi Start Glider	3/2	80
Cat /HLG	2	60

Note 1: 250 gram maximum model weight applies to all classes

Note 2: 3 flights, no rounds

Note 3: Competitors may enter more than 1 class

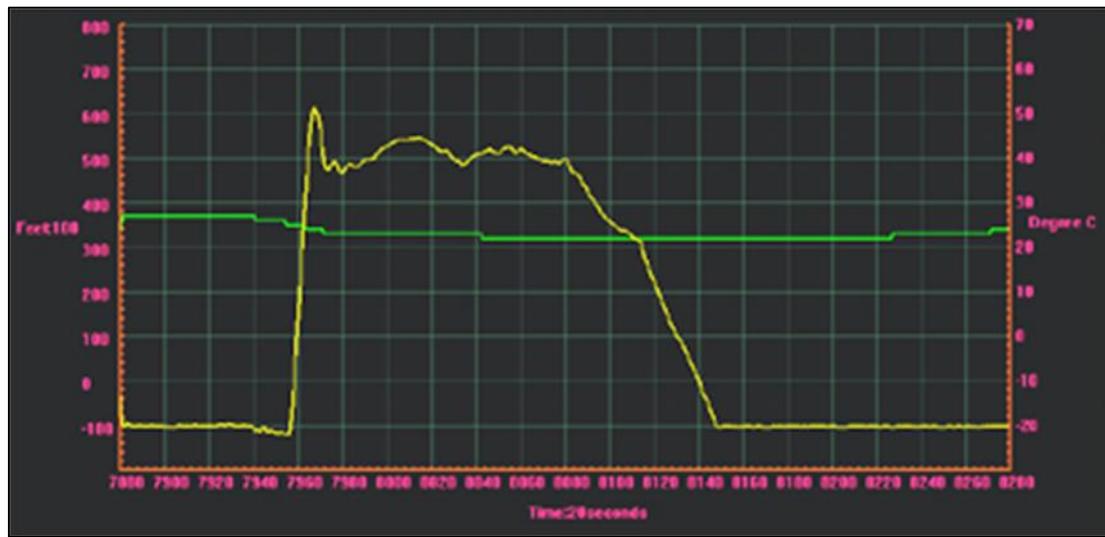
Note 4: DT fly-offs will be used as appropriate, with fly-off time as per max in class

That's a pretty good spread of classes, so you must be able to dig up a model & have a go. It can't be too onerous to make three flights between 10.00am & 3.30pm! Note we haven't set an entry fee yet - that will depend to a large degree on how we do financially at the 1st meeting on 29th June. Worst case, it will be £10 for the day inclusive of comp entry, best case - somewhat less. Plus of course, if all goes well, we will welcome sports fliers to the same meeting.

4th Area at Beaulieu

The weather held up all day, the wind direction didn't vary too much & some good flying was had by all who attended.

Highlights included Roy Vaughn's Creep climbing vertically at a very rapid rate - interestingly Roy had a digital altimeter on board that allowed him to record the flight pattern - his prime criticism was (lack of) calibration of altitude & temperature, one seemed to be on the low side & the other on the high side! That apart, the recorded data gives a very good indication of the flight pattern - see below - his 3rd flight.



David Cox was his normal energetic self, maxing out in vintage power with his Jimp & then doing a very good fly-off time. Dave Etherton did likewise in combined glider as did Tony Shepherd & Mo Peters in E30. John Hook was flying his Tototl - an unusual Mexican high thrust design published in the Aeromodeller in August 1955, inherited from our late Chairman.



All photos by courtesy of Peter Hall & Dave Etherton, who combined to get a variety of excellent action shots – including one of yours truly – just to show that I am capable of occasional movement!





Drones et al

What more is there to say now: The DfT & CAA seem to be entrenched, non responsive, equipped with cloth ears & oblivious to aeromodelling. The new Minister of Aviation has an excellent CV in education, patently knows nothing about aviation but is content to parrot the official party line. Have you had any response to your letters to any of them? I've not had a reply from DfT, the reply from the CAA ignored all the questions & points raised but interestingly did try to clarify the issue of registration. To quote "*Model aircraft associations or clubs as operators: model aircraft associations or clubs would have the option of registering as the operator with their members acting as remote pilots. In this scenario, the association or club would need to meet any legal requirements and take accountability & responsibility for the actions of their members, and members would need to abide by the remote pilot requirements.*" I can't quite get my head round this but does it mean that the BMFA could act as the sole point of registration, thereby paying £16.50 on behalf of all its members? My local MP received copies of all my correspondence & has promised to write to the Minister on my behalf. I await a reply with some interest!

Since publishing a newsflash on 7th June about the joint Science & Technology / Defence Select Committee hearing on drones, there has been silence from the BMFA? I don't doubt that David Phipps is diligently working away in the background, but as stated previously he has an incredibly hard & uphill task to make any headway against an intransigent bureaucracy.

The recorded minutes of this hearing, although lengthy do provide an insight to official thinking. Over & above the current topic of registration, there seems to be a fixation on "electronic conspicuity" - broadly translating this means that anything that moves in the air must carry an active electronic device that broadcasts location, identification & other data continuously.

This is a precursor to the control of air space, the planning of air corridors & looking to the future, probably the taxation of anything that is airborne that uses designated air corridors e.g. drones, air taxies.

Model aviation did get a few mentions but nothing of significance & was largely ignored. The submitted evidence from "interested parties" also makes for informed reading. A common thread appears to be that registration does nothing to prevent the illegal use of drones & that policing of the intended legislation will be "difficult". What revelations!

The plus side of all this is the time scale for implementation will see me digging up daisies! On a personal note, I shall continue with BMFA membership (as long as the BMFA survives & the membership fee doesn't become prohibitive), & will fly models less than 250 grams - unless of course that part of the legislation changes as well to encompass the weight limit - in which case, it's time to give up. A start has been made on thinning out models well past their "fly by" date & way over the weight limit with a couple of trips to the local dump, so at least after many months I can now get back into the model room.

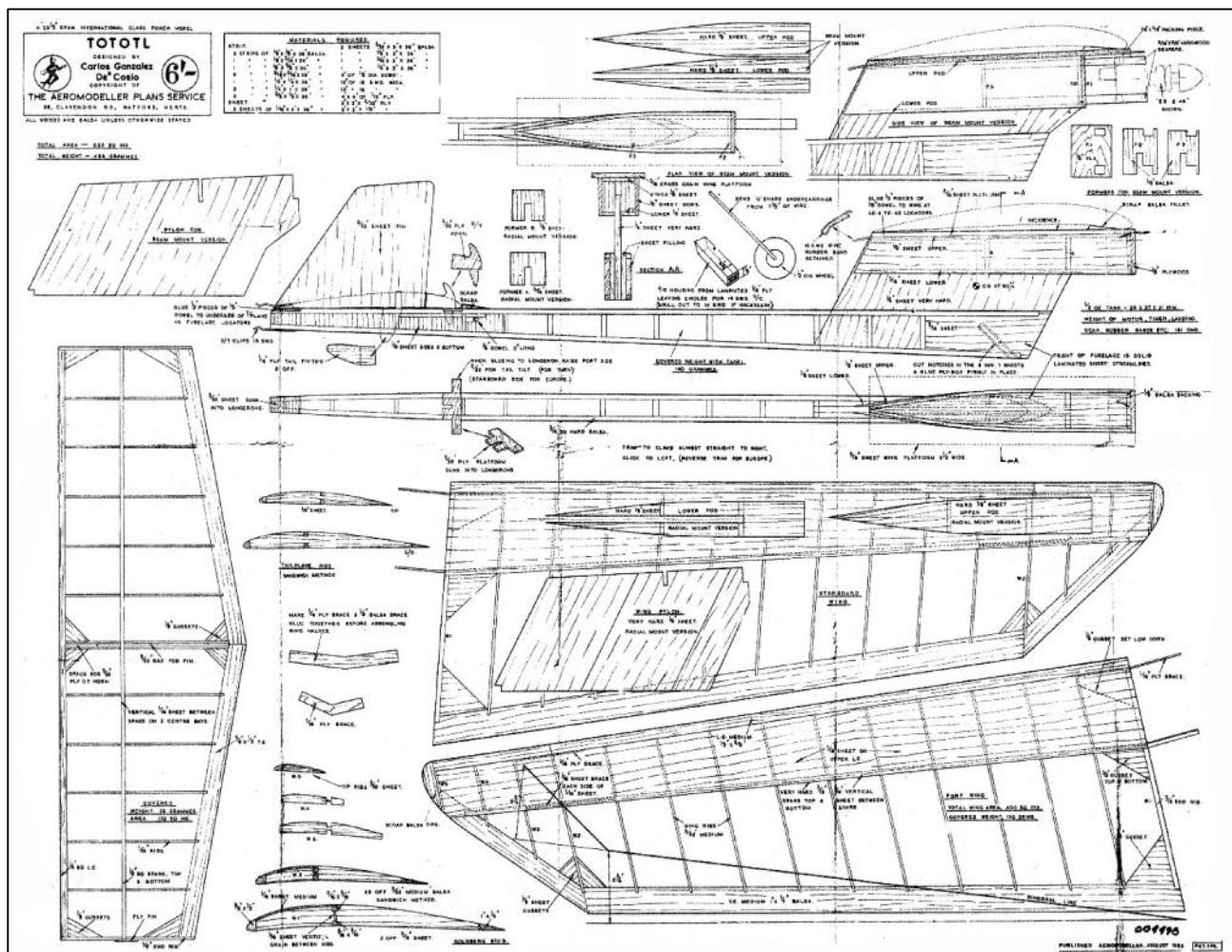
Enough of my grumbles but it would be illuminating to get some feedback from SAM1066 members? How about a few letters to the Editor, even if they are to criticise my opinions!

Roger Newman

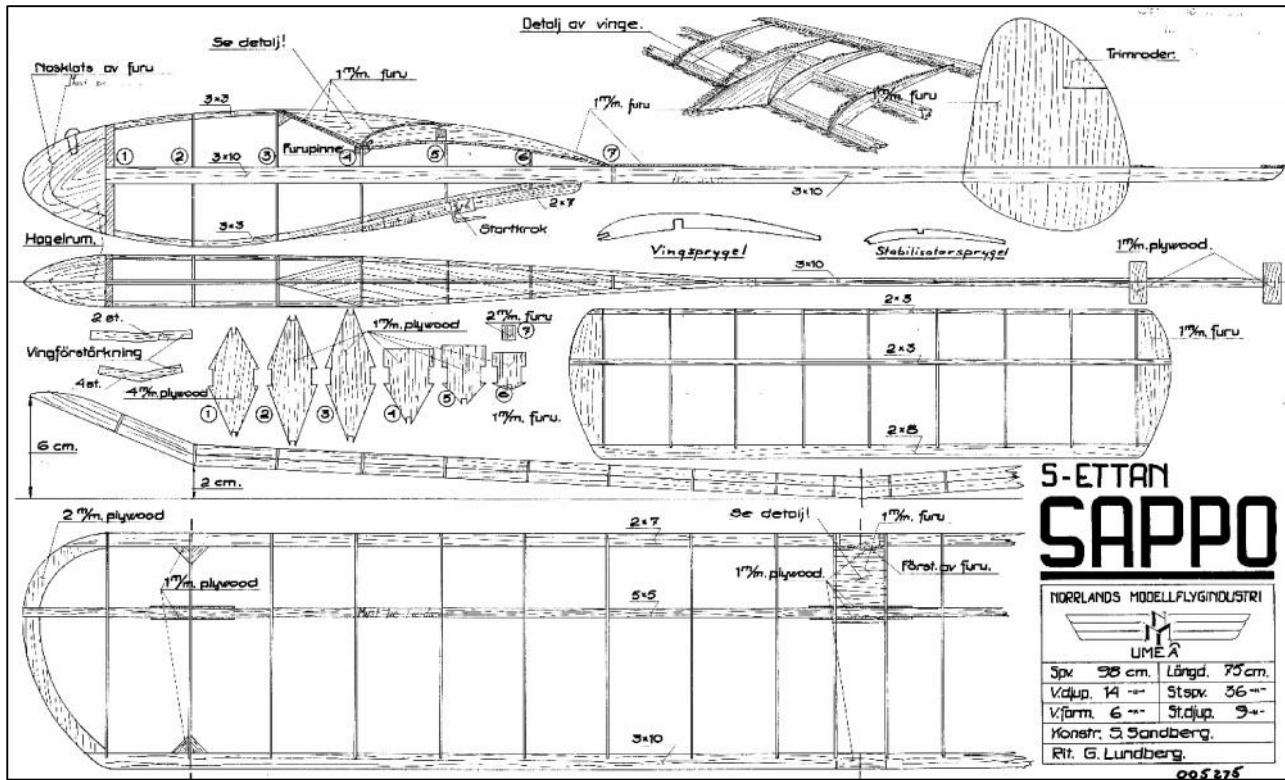
Plans for the month

Roger Newman

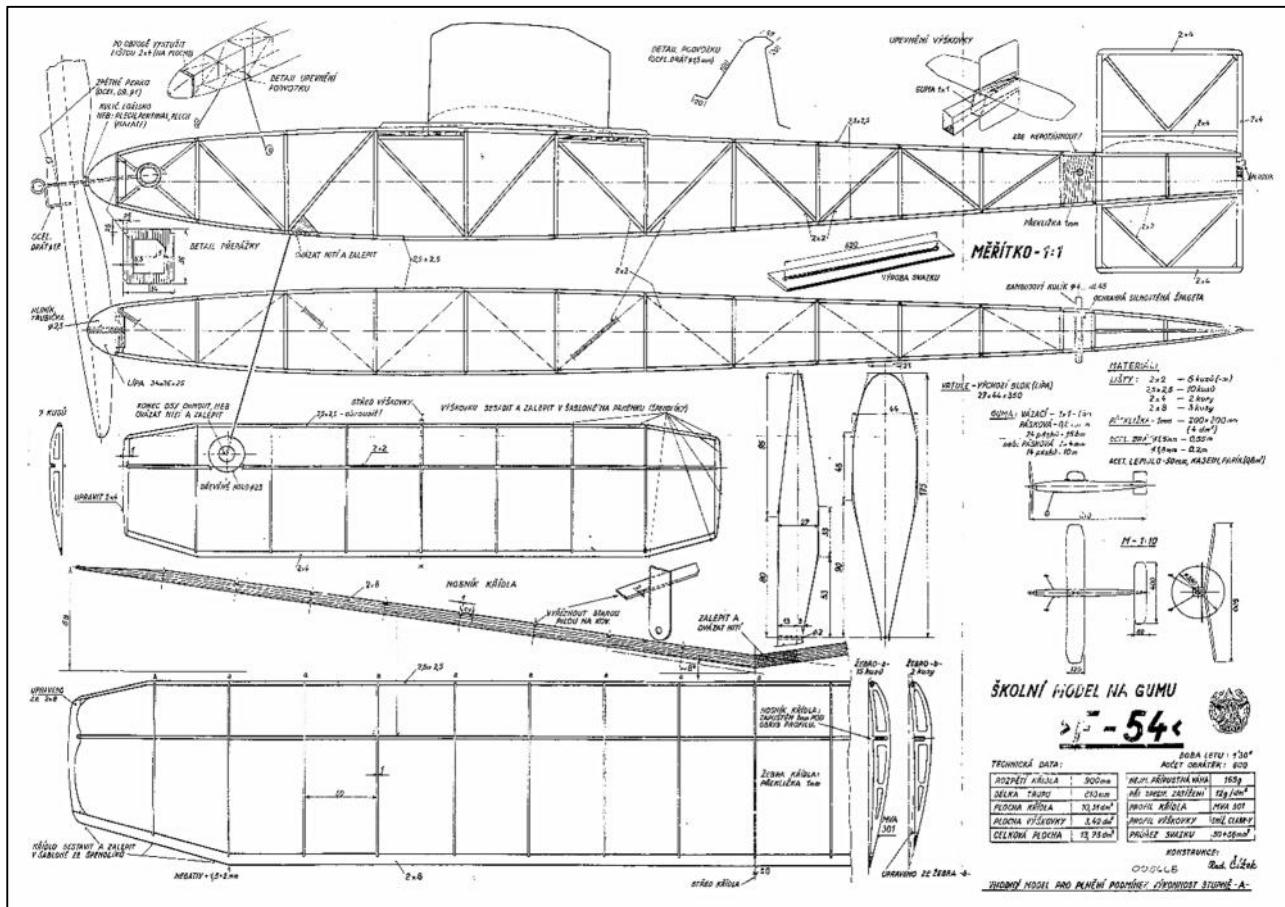
Power: Total – why not!



Glider: Sappo – one for under 250 grams from the Nordic region



Rubber: F-54 – and another for under 250 grams from the eastern Bloc



Roger Newman

Drone Zone Flying Restrictions

For those of you who wish to operate within the law as from 13th March, according to the latest Air Navigation Order amendment, there is a very good interactive map that can be accessed via [Airfield restrictions - Dronesafe](#). You can zoom in anywhere in the UK and the restricted zones are clearly marked.

Accompanying text from this website is as follows:

UK FRZ Map

This map enables UA operators to **remain clear** of the new UA FRZs that are created as part of the latest amendment to the ANO.

It is illegal to fly any drone at any time within these restricted zones unless you have permission from air traffic control at the airport or, if air traffic control is not operational, from the airport itself.

Do have a look – if only to re-assure yourself before breaking the law!

Rules for operation at Middle Wallop in 2019:

SAM1066 has been granted three separate days at Middle Wallop,

Sat.Apr.21st, - Sat.Jun.29th, - Sat.Aug.10th.

The first meeting will be for competitions flying only. If no problems arise from the first meeting, then sports flyers can be included in subsequent meetings subject to their agreement to conditions set out below.

For all models, SAM1066 will apply the 250 gram rule which exempts model aircraft from any proposed drone regulations that encompass aeromodelling. Simply put – this means that all models flown on the field must weigh less than 250 grams.

For ALL models, the fitting & use of an operable DETHERMALISER (DT) is mandatory for all flights – clockwork or (preferably) RDT. The use of a fuse DT is not permitted.

For models entered in competitions.

1. For all comps, the max is limited to 2 minutes or less dependent on conditions prevailing on the day.
2. All competition fly-offs will be subject to the timing procedure known as "DT Flyoff"
3. ie: the flight will be timed to the ground and a deduction made of two times any overrun of the DT time set by the CD.

For models not entered in competitions.

- a. For all flights the DT must be set to operate at, or earlier than the max time set on the day.
- b. All models must carry name & address label with full contact details (Name, address, mobile and/or landline number) in a visible position.
- c. All models must carry BMFA membership number in a visible position.
- d. BMFA membership cards must be shown on entry to the field.
- e. Random checks will be carried out during the day. Anyone found to be infringing any of the above rules will be asked to leave the field.
- f. Checks will be made throughout the day on wind speed & direction.

Should the wind speed and / or direction change such as to cause potential problems of keeping models on the field, the organisers reserve the right to take appropriate action which may result in a change of location or worst case, in the cessation of flying for the remainder of the day.

Salisbury Plain: - Area 8 - 2019.

The booking of Area 8 for FF use in 2019 has been a bit more protracted, and tenuous than in previous years, but has now been completed.

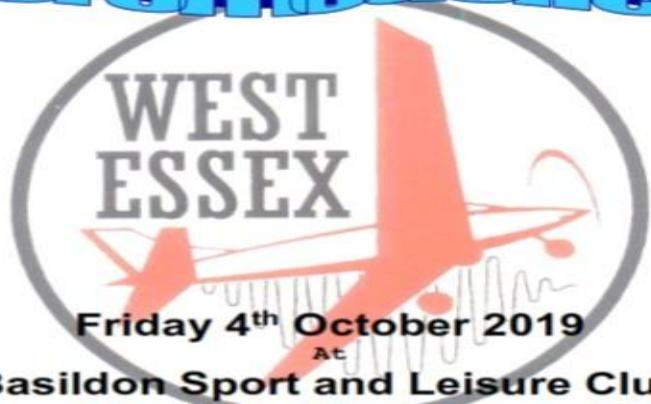
Every Saturday/Sunday, plus the 3 Bank Holiday Mondays have been allocated for our use, conditional on BMFA representation at the monthly Training Area Allocation Conferences, and final approval on the Friday morning preceding each weekend.

Most of you will be aware that the Area is to be used as a film set at some point and would be out of bounds to us for some time. The latest information received is that 22nd April to 17th May dates would be removed due to filming, but that the dates may change slightly. I guess that nobody really knows what will happen, and that details will be released at the monthly conferences.

For those wishing to sport fly/trim an annual season ticket can be obtained through donna@bmfa.org for £18. The terms and conditions remain the same as in previous years.

You are reminded that the annual licence is paid by the BMFA, and that anyone entering a contest, must pay a site access fee of £6. This applies to club Galas, Centralised, and Decentralised BMFA events. The exception to this is for BMFA Contest Season Ticket holders, who will not be required to pay this for BMFA Centralised events, and the World Cup events.

Auction
WEST ESSEX
Aeromodellers



Friday 4th October 2019
At
Basildon Sport and Leisure Club
Gardiners Way, Basildon, Essex, SS14 3AP

www.basildonsportandleisureclub.co.uk

Doors open at 6.30 pm
Auction starts at 8 pm
£3 entrance on the door
Large hall, side entrance for goods
Inclusive With
Licensed Bar & Food
10% commission
(No job lots less than £10)

 **EAST ANGLIAN GALA**

27th, 28th July 2019. Sculthorpe Airfield,

It will soon be that time again for free flight aeromodellers to head towards the lush green and spacious fields of Sculthorpe airfield. This site offers the largest unobstructed flying site in the UK set in the heart of the Norfolk countryside.

Camping nearby at Fakenham Race Course, 01328 862388;
the Garden Caravan Site, Barmer Hall, Syderstone, 01485 578220
and Fakenham Camp Site, fakenham.campsites@gmail.com

Saturday 27 July	Sunday 28 July
BMFA Rubber	BMFA Power
Vintage Rubber/Power	Combined Electric
Classic Glider	BMFA Glider
Tailless	Mini Vintage
E36	Classic Rubber/Power
P30	CO2
HLG-CLG.	Vintage Glider
	Bowden

BMFA rules and Senior Championship points for above events .
Start time each day 9.00 am, finish 6.00 pm. Competition entry £10.00 all classes or Season ticket for each day. Bowden registration before 10.30 am on Sunday.
Location. Sculthorpe airfield, OS Map reference TF 852300. 100 Metres in a NE direction along the B1454 from its junction with the A148 road from Kings Lynn to Fakenham. No refreshments on the field this year but there is a cafeteria close to the entrance. BMFA membership essential. For safety reasons no motorised retrieval and no dogs.
Flyers not taking part in BMFA events, fun flyers and engine runners must pay £6.00 site fee at control.

For further information on this event contact:
Michael Marshall Tel: - 01223 246142 or email: - hiver666@aol.com

F1G & Vintage Coupe Events 2019

Date	Venue	F1G	Vint	Organiser	Comments
2 nd Dec 2018	North Luffenham	✓*+	✓	gavin.manion84@gmail.com	Grande Coupe de Birmingham. F1G for A/M Trophy, Vintage for Vintage Plate
10 th Feb 2019	Area Venues	✓*		BMFA areas	1st Area. F1G (Plugge)
27 th April	M Wallop		✓	SAM 1066	Vintage Coupe
5 th May	RAF Odiham	✓*	✓		Southern Area Gala Combined Vintage and F1G
27 th May	Barkston Heath	✓		BMFA	FF Nationals. F1G Mon 27th for 308 trophy
2 nd June	Oxford Portmeadow	✓*		laurencemarks64@gmail.com Andy Crisp 01865 553800	F1G
29 th June	M Wallop		✓	SAM 1066	Vintage Coupe
25 th July	Area Venues	✓*		BMFA areas	5th Area
10 th Aug	M Wallop		✓	Croydon / SAM1066	Cagnarata Day - Vintage Coupe (H'cap)
18 th Aug NB Saturday	Salisbury Plain	✓*		BMFA	Southern Gala
1 st Sept	Salisbury Plain	✓*	✓	Crookham	Crookham Gala , Combined Vintage and F1G
28/29 th Sept	Salisbury Plain	✓*		BMFA	London Gala, Coupe on 29th
6 th Oct NB Saturday	TBC	✓		BMFA	Midland Area Gala
12/13/14 th Oct Note Flexi Date	BMFA Buckminster		✓?	FF Gala, John Ashmole 01406 370188	Probable Vintage Coupe
19 th Oct	Salisbury Plain	✓*+	✓	Croydon Coupe Day /SAM1066	Coupe Europa. Vintage for the AAA trophy, Team F1G for the Flitehook Trophy
1 st Dec	TBC	✓	✓	gavin.manion84@gmail.com	6 th Coupe De Birmingham

(*) Qualifying event Southern Coupe League. (+) Qualifying event Eurochallenge F1G 2018/19
All Vintage Coupe events for SAM1066 Trophy, 1st – 3points, 2nd – 2pts, 3rd – 1pt; no points for last place!

Croydon&DMAC 2019 Competitions

CROYDON WAKEFIELD DAY Sunday 21st April, Beaulieu Old Airfield

4oz and 8oz Wakefield, - F1B (in rounds),
Marcus Lightweights (RAFF V, Bazooka, Dinahmite, Supa Dupa).

Start 10am. NB all flyers must have a Beaulieu permit which can be obtained at;
<http://www.beaulieuemodelflying.org.uk/permits.html>. cost is £10 seniors, £5 juniors.
 Entrance to airfield is 2.5 miles west of Beaulieu village on B3055 to Brockenhurst,
 opposite a small public carpark.

CROYDON COUPE EUROPA Saturday 19th October, Salisbury Plain Area 8.

F1G (in rounds), - Vintage Coupe.
Flitehook trophy for F1G teams.

Start 10am. Entrance to Area 8 is 2 miles west of Shrewton on B390 to Chitter.

For further information on events please contact:
 Ray Elliott; tel 020 8997 7745, email ray.elliott8@btinternet.com.

Peterborough Flying Aces Nationals SATURDAY 31st August 2019
at Ferry Meadows, Nene Park, Peterborough PE2 5UU
Competitions 10.00 to 16.15

3 NEW EVENTS FOR 2019!

Vintage Model Company "PILOT" Rubber Duration. Senior and Junior Classes Plus Fly Off - Best Senior versus Best Junior. **Note!** Intending competitors may purchase the kit from V.M.C. for only £20 by quoting the code "acesfly". Model must use kit prop. **Note!** We would like to see that any junior has had a hand somewhere in the building of the model.

Open E20 Electric Duration Max length and span, 20 inches. Any motor, battery and timer. Max motor run 8 secs. DT and RDT permitted. Certificate for best "Ferry 500" Restricted Class model. (for rules see www.peterboroughmfc.org).

Open Rubber Scale. At last! a flight profile judged class for scale rubber models that are not necessarily "Kit" models.

SCALE MODELS - NOTE! ALL scale classes, except MASEFIELD Rubber Scale are judged for flight profile and realism by the Flight Judges. They may ask for some verification, so please have the plan or, if scratch built, the 3 view available on the field.

Masefield Rubber Scale- Any scale rubber model, to which **Masefield** type bonuses will be applied. **No flight judging**, just duration plus bonuses. Present model to control for processing.

Open CO2/ Electric/ Rubber Scale Judged for flight profile and realism. Any C02 motor/tank permitted. See note re verification

Kit Scale ANY rubber powered kit model up to 36" span. Judged for flight profile and realism. See note re verification

Jetex/Rapier Authentic Scale Judged for flight profile and realism. See note re verification

EDF Authentic Scale Judged for flight profile and realism. See note re verification

Jetex/ Rapier Profile Scale Judged for flight profile and realism See note re verification

P-20. 20" span and length. Max 8" plastic prop, 6 gram motors (may be external).

Cloud Tramp 5 flights NO MAX. (best and worst times discarded, and the remaining 3 times totalled. Note! If fewer than 5 flights logged the best and worst are still discarded.

Tailless Rubber Duration: Max span 30" (tip to tip). Max rubber 10gm, Prop 9.5" max dia. commercial plastic. (may be modified.) No in flight movable surfaces, except DT)

Frog"Senior" Rubber Duration (for plan see <http://www.houseoffrog.co.uk>)

Rubber Ratio: NO MAX. Any rubber powered model with wing span 15"- 25" (tip to tip). (KK" Elf is eligible). Flight score is total time in secs (for 3 flights) divided by span inches.

Catapult Glider: Catapult, max 2 grams rubber on a 6" max handle. This equates to a 280mm length of 3/16" rubber tied into a single (140mm) loop. Any model permitted.

TableTop Precision Precision flight time Rubber event - models must Rise off Table.

36 inch Hi-Start Glider: Any glider up to 36"span launched by the supplied "Hi start" bungee. Includes a prize for best performance of a **SCALE** glider (proof of scale reqd.)

Best Unorthodox: Must be seen to fly by nominated Scale Flight judge)

Rubber Scramble: 20 minutes, use any rubber powered model that qualifies for one of the above events. Competitor must both wind and launch, from box, but may use a retriever.

Flying Swarm Mass launch for any non electric model that is eligible for one of the day's competitions. Last model down is the winner.

Young Flying Aces; Prize for Best Junior: Scrolls for top 3(Jun.17yrs or under on 31/08/19)

Prizes for 1st place: Scrolls for 1st, 2nd and 3rd:

Bumper Raffle: Note: this is a **Free Flight** event: **No Radio Control: Proof of Insurance required for all flyers.**

Revel in the special atmosphere created at this unique event: Discounted parking.

Toilets, Café, and Park Visitors Centre.

Contact Brian Waterland on 01778 343722 (07717461000 on the day).

See also Peterborough MFC Website at www.peterboroughmfc.org

Cocklebarrow Farm Vintage R/C Meetings 2019

7 July - 18 August - 29 September

Signposted from Aldsworth Glos.

**on the B4425 between Cirencester/Burford
and off the A40 between Northleach and Burford
[follow SAM 35 signs].**

All types of R/C up to 1969, sport flying no competitions.

BMFA insurance essential [A certs. not required]

Contact Tony Tomlin

Tel: 02086413505 email: pjt2.alt2@btinternet.com

L'AQUILONE SAM 2001
TOMBOY RALLY INTERNATIONAL POSTAL CONTEST 01/07/2019 – 30/06/2020

We wish to present this competition to all the lovers of this nice model with the only aim of having fun in a postal contest which is organized to provide some fun flying together or at the same time as are all postal contests. The Tomboy Rally wants to prove the performance of this model along with the ability of the builder and pilot, without reaching the peak agonism of usual contests and only wishing to fly the model having fun in a relaxed manner. After having carried out some tests we have decided to admit the use of i.c. engines and electric motors trying to reduce the gap between them.

Model

- The 36" or 44" wing span (as per plan Aeromodeller) and 48" (as per Boddington plan or 36" scaled up) models are admitted;
- Models may be fitted with floats as per plan (scaled-up for 48" version);
- no minimum weight;
- reinforcement or lightening of the structure with respect of the basic outline of the original model are admitted;
- materials to be used are those found on the plan;
- plastic covering in place of tissue, silk or other is admitted;
- More than one person can use same model;
- Same model can flight in L.& or float version;
- Lone fliers can self launch and time

Engine/motors

I.C. engines are admitted within the following limits: **36"-44" wingspan:** Any engine 1 cc. max, Fuel tank : 3 cc.
 R/C carburetor is admitted.

Electric Motors:
 Any electric motor is admitted with direct drive

The engine cannot be stopped and started again: the motor must run continually without interruptions till the end of the battery charge or competitor's decision. No folding prop is admitted; if a folding prop is used the blades must be held open with a rubber band; freely assembled admitted batteries:
 -450 Mah 2 cell LiPo; separated batteries pack for Rx alimentation is allowed.

48" Wingspan:

I.C. Engines: Any engine with 2.5 cc. maximum displacement; Fuel tank - 6 cc. R/C carburetor is admitted.

Electric Motors: Any electric motor is admitted with direct drive freely assembled admitted batteries: -500 Mah 3 cell LiPo separated batteries pack for Rx alimentation is allowed

The engine cannot be stopped and started again: the motor must run continually without interruptions till the end of the battery charge or competitor's decision. No folding prop is admitted; if a folding prop is used the blades must be held open with a rubber band;

Flights and results

Each competitor may fly as many flights as wished during the admitted period but only the best flight will be considered for the final result. Hand launches are admitted. The flight time start when the model is released or takes off. The flight time ends when the model lands or hits a fixed obstacle. In case the model flies out of sight the timekeeper will time for 10 seconds after losing sight of the model. Timing will continue if model is seen again or stopped after 10" deducting this time from the total time of the flight.

Awards :

A diploma for all competitors and prizes for the first three in each version rank. Special prize for best flight in float version.

Results

Results, address, photos and technical specification about model must be forwarded to the Organization within the 15th June 2018 to Curzio Santoni (cusanton@tin.it) or to Sianf ranco Lusso (gfl@orange.fr). Many pleasant flights and happy landings to ALL!!!

Special Prize Vic Smeed
 SAM 2001 have scheduled an extra Diploma that will be awarded to the best flight in Tomboy floatplane version (36", 44" or 48") taking off from water. The Editor will send to the winner a Diploma signed By SAM 2001 President and a bottle of special Italian Wine to drink to Vic Smeed! Good ROW and flight.

Special Prize David Baker
 The 2012 was the 5th edition of SAM 2001 Tomboy Rally and we have scheduled a special prize for the three best flights obtained with 36" Tomboy F/I. Only engines diesel max 0.75 c.c. shall be used. The other rules are the same for 36" or 44" wingspan type. It is possible to use an R/C Tomboy, however, being this a free-flight contest, the time must be stopped when transmitter is used, since the aircraft model should fly freely from any control from the ground. Good thermals

Impington Village College - Cambridge Indoor flying

on 3rd November 2019 9 am to 5 pm

We will be using the large (100 x 50 x 28 ft) sports hall at the College. The only restrictions are no radio models in the main hall and no internal combustion engines, jets or catapults anywhere.
 Also Round The Pole (4.5 metre lines) and small electric helicopter and fixed wing flying (X twin or Vapour type) in a separate hall (radio or infra-red).

SAMS MODELS hope to be in attendance to supply all your needs on the day. Contact Chris Strachan shortly before the event if you need to be certain. Contact details below.

Competitions:

There will be two, low key free flight (and one car!) competitions:

- **A Peanut** event using a simplification of the usual international rules,. Maximum size of model either 13" span or 9" length excluding propeller
 A GA drawing, photograph or any other proof that the actual aircraft existed.
A single judge for all entrants to award up to 30 scale points and up to 90 "difficulty bonus points", the purpose being to encourage those flying models of difficult and adventurous prototypes
 Any number of flights with a 10 second bonus for ROG.
 Total of best two flights plus scale and bonus points to decide final score
- The usual duration event for **Bostonian** models. Any design to the Bostonian formula (If you are unclear about the Bostonian formula rules ring or email the contact below). Minimum airframe weight 14 gm and all flights to be ROG. Total score from best 3 flights
- For both competitions get your flights timed and reported to control. As many attempts as you like. Awards in each event for overall winner and best junior (under 18). Bostonians to be weighed.. No builder of the model requirement in any competition. Build one for your wife (or husband), child or grandchild who just has to wind and launch.

We will also feature the **Racing Car event** as usual. This is a fun event for rubber powered cars. We vary the distance to be covered, number of heats, etc. depending on the entrants on the day! Ring or email below for any further information and for plans of suitable vehicles.

Exhibition

We would like models of all types in the exhibition and models other than aeroplanes are more than welcome. Bring whatever you like but please bring something (don't be shy) as this is a feature much enjoyed by our visitors - both flyers and spectators. It is also a good way of showing our kind of modelling to the public.

Seminar

The seminar will take a different form this time as Mike Cole will be bringing and running his scale model vintage engines. Don't miss the opportunity to see them and talk to Mike. When you see the model 9 cylinder Bentley rotary running at speed it is absolutely mind blowing.

Round the Pole

Will Beavor will be bringing his equipment, using 4605 connectors at the model, available from The RTP Hut (www.thertphut.co.uk). As usual RTP will share the second hall with small R/C helicopters and fixed wing models.

Refreshments

Hot drinks and snacks will be available from the Sports Centre

Web Site

Have a look at our website at www.impmac.co.uk for more details of club activities

Cost of admission: Indoor Flyers - Adults £6.00, under 18s £1.50, Spectators and Chatters - £3.00

Directions to Impington Village College: Post code CB24 9LX

Leave A14 at the first junction East of M11 J14, signed Cambridge B1049. At the roundabout take B1049 to North signed Cottenham, Histon. In ½ km at 2nd lights turn right into New Road. Pass hospital entrance on right. Village College is next on right (two entrances, 1/3 and 2/3 km). Entrance to be used and car park will be signed.

Contact:- Chris Strachan Tel no: 01223 860498 Email: chris.strachan@btinternet.com

Indoor Flying with the South Birmingham MAC
Mainly Free Flight
Thorns Leisure Centre.
Stockwell Ave.
Off Thorns Road - Quarry Bank - West Midlands - DY5 2NU
Saturdays 1pm until 4pm

2019
Jan 12th – Feb 9th – Mar 9th – Apr 6th – May 4th
< Sep 14th – Oct 19th – Nov 16th – Dec 14th

Admission - Flyers £8.00 - Spectators £2.00
**Ultra-light R/C models may be flown for the first 15mins of each hour
 (quad copters or heavy fast flying models not accepted)**
**For further information phone Colin Shepherd 0121 5506132
 or e-mail cosh43@hotmail.com**

 *Waltham Chase Aeromodellers*

INDOOR F/F MEETINGS

Waltham Chase Aeromodellers, in association with South Hants Indoor Flyers, are pleased to announce the continuation of the Indoor F/F Meetings held at the Main Hall at:

Wickham Community Centre, Mill Lane, Wickham, Hants PO17 5AL

These meetings will be held on the following dates:
 Meetings will run from 7.00 p.m. to 10.00 p.m. on Tuesdays in the Main Hall

2018
2nd Oct - 6th Nov - 4th Dec

2019
8th Jan - 5th Feb - 5th Mar - 2nd Apr
7th May - 4th Jun - 2nd Jul

The hall is particularly suitable for indoor free flight models of all types,
 with a ceiling free of obstructions.

Tables and chairs will be available in the hall, the organisers are always grateful for assistance with moving furniture. A hot drinks machine is available on site.

Admission to the meetings will be £5 for Senior fliers, £1 for Junior fliers and £1 for spectators, whilst accompanied children will be admitted free.

Fliers will be required to show proof of insurance.
 No R/C models may be flown at these events.

Flitehook, who carry a large stock of indoor models and accessories, will attend many of the meetings.

Waltham Chase Aeromodellers welcome all indoor F/F fliers to these events.

For further details please contact:
 Alan Wallington, "Wrenbeck", Bull Lane, Waltham Chase, Southampton, Hants.
 (Tel. 01489 895157) (e-mail: alan@wcaero.co.uk)
 or see our web site: www.wcaero.co.uk

FLITEHOOK
Indoor Free Flight Meetings

**West Totton Centre,
 Hazel Farm Road,
 Totton, Southampton.
 SO40 8WU**

Contact: Tel. 02380 861541
 E-mail flitehook@talktalk.net

Café on Site

Fliers £8
Juniors & Spectators Free
 Flyers must be BMFA Members

Sundays 10.00a.m. to 4.00p.m.

2019
8th Sep: 13th Oct: 10th Nov: 8th Dec: 29th Dec:

2020
12th Jan: 9th Feb: 8th Mar: 12th Apr:

SAM Speaks USA.

This bi monthly emagazine can be obtained from the Society of Antique Modelers. 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!

SAM Speaks

March-April 2019 - Number 266



Cover From November 1929 Model Airplane News

THE 2019 FREE FLIGHT FORUM REPORT

It's a Bumper Issue

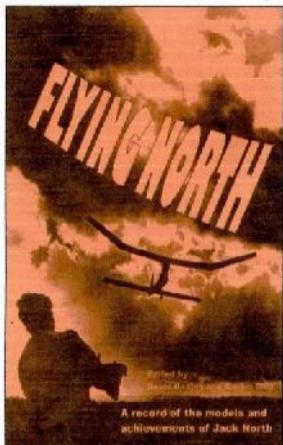
The Free Flight Forum Report is now in its thirty-fourth year and it's the biggest yet, with no less than 17 papers, covering a vast range of the topics that make free-flight so fascinating.

Only Joules and Forces - Peter Watson;
 Classic 1/2A Models - Simon Dixon;
 Trimming the Sopwith Snipe - Mike Smith;
 Russell Strips - Russell Peers;
 Testing June 2016 Tan Super Sport in April 2017 - Tim Chant;
 Developments in Carbon Wing Construction - Stuart Darmon;
 Buckminster - We've Got It; How Can We Use It?
 - Gavin Manion/Stuart Darmon;
 The Management of Models - Mike Woodhouse;
 Combined BMFA Rubber and CdH (F1G) - Phil Ball;
 Drone Legislation and Free Flight - Dave Phipps;
 The Rate of Climb of Model Aircraft - Dr. John Gibbons;
 A Review of Contemporary FAI Space Modelling - Stuart Lodge;
 GPS versus Radio Trackers - Mike Woodhouse;
 About Time - Chris Edge;
 "W" Style Geodetic Ribbing for Model Aircraft and Microlights
 - Denis Oglesby;
 Flat Plates, Cambered Plates and Coupe Aerofoils
 - Alan Brocklehurst;
 FAI Free Flight Since the BOM - Stuart Darmon.



The UK price is £13.00 including postage; to Europe it's £15 and everywhere else £17. Sales of the Forum Reports help to defray the heavy expenses of those representing Great Britain at World and European Free-Flight Championships. 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.



Flying North is a 163 page book covering the model flying career of Jack North, and including 23 previously un-published plans of his aircraft. Access to Jack's drawings and notes dating back to 1938 means that there are a number of designs in the book likely to be tempting to the nostalgia-minded.

Contact: Martin Dilly on 020 8777 5533 or write to: 20, Links road, West Wickham. Kent BR4 0QW or e-mail: martindilly20@gmail.com

The price in the UK is £18; airmail to Europe £20 or to anywhere else £22. Cheques should be payable to BMFA F/F

Team Support Fund, in pounds sterling only, and drawn off a bank with a branch in the UK, you may also order by credit card, all proceeds help to fund the expenses of those representing Great Britain at World and European FF Championships

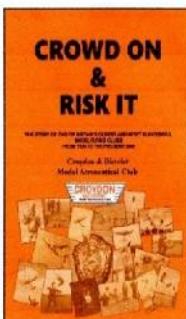
CROWD ON & RISK IT

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 Bassingbourn.

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 £8 by PayPal or cheque.

Contact Martin Dilly (martindilly20@gmail.com), phone/fax 020 8777 5533 or write to 20, Links Road, West Wickham, Kent BR4 0QW for your copy.



DILLY JAP IS BACK

After a bit of a gap since the final 5 yards came off my last bulk roll of Japanese tissue several people have asked if it will be available again, so I've just received my sixth roll. Doing the sums, that means that there's now just under a mile of Dilly Jap covering models all over the world.

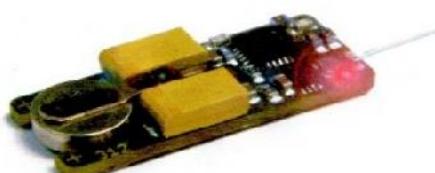
Anyhow, since the last roll came in 2015, the price is slightly higher (maybe as a result of you-know-what ...xit and its effect on sterling), but it's still only £13 for a five yard roll a yard wide.

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 normally sell it in rolls at contests, as it's a shame to fold it for mailing, but I can do that if you prefer.

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

BUGS

Free Flight Model Tracker



£50.00 - each including 6 batteries

Ready to use radio tracker

Suitable for most handheld receivers

Powered by one 312 ZincAir hearing aid battery

27mm long, 11mm wide, 5mm thick 3 grams

including battery

Run time around 10 days

Red LED flashes when transmitting

Available in any frequency from 140MHz to 980MHz

Supplied in protective heatshrink

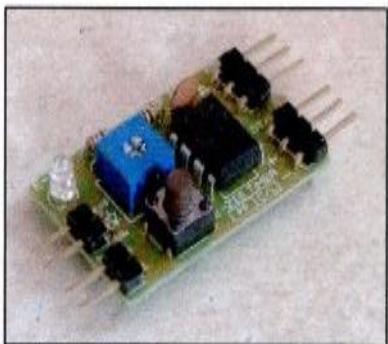
Very quick delivery, often next day

On sale at

http://www.leobodnar.com/shop/index.php?products_id=217

or contact Peter Brown 07871 459291 for options

E-Zee Timers



E-ZEE FF Combined Electric Motor Power and Servo Operated DT Timer Type EFF 1
Cost £15.00 + p & p

This timer controls electric motor power and run-time (via an ESC) and after a further delay drives a D/T servo to terminate the flight. The motor power is set by a single turn potentiometer and the motor run and D/T periods are set by a simple push button / LED interface

- motor run duration:-adjustable 1 to 30 seconds, set in 1 second increments
- d/t duration:-adjustable 10 seconds to 5 minutes, set in 10 second increments
- motor power:-adjustable at all times from zero to full throttle (by potentiometer)
- push button immediately stops the motor at any point during the flight profile
- duration settings are saved in memory a single button push serves to repeat a flight.

Length 30mm Width 20mm Height 11mm Weight 5gm

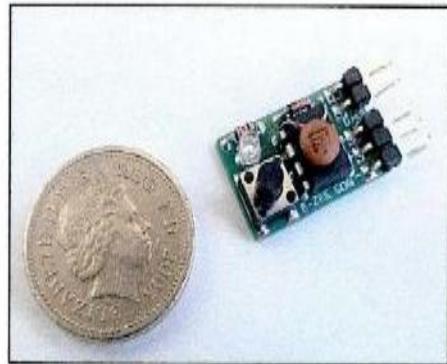
For installations where the timer is inaccessible remote pushbuttons and LED's are available

Servo operated DT Timer only Type SDG 1 Cost £12 + p & p

This timer was originally developed for use with 36 inch hi start classic gliders, but will be of interest to all sports free flight flyers not requiring electric motor control. The timer drives a D/T servo to terminate the flight, the D/T periods being set by a simple push button / LED interface. Driven by a small 30mAH battery and using a 2 gram servo the avionics can be used as nose ballast so there is no overall weight gain

- d/t duration:-adjustable 10 seconds to 5 minutes, set in 10 second increments
- push button immediately cancels the flight at any time
- duration settings are saved in memory a single button push serves to repeat a flight.

Length 22mm Width 13mm Height 11mm Weight 2gm



Timers are supplied with a comprehensive instruction manual and users guide

E-Zee Timers have been designed and are manufactured in the UK
Exclusively available from

Dens Model Supplies

On Line shop at www.densmodelsupplies.co.uk
Or phone Den on 01983 294182 for traditional service

Provisional Events Calendar 2019

With competitions for Vintage and/or Classic models

February 10 th	Sunday	BMFA 1 st Area Competitions
March 3 rd	Sunday	BMFA 2 nd Area Competitions
March 24 th	Sunday	BMFA 3 rd Area Competitions
April 19 th	Friday	Northern Gala, Barkston Heath
April 21 st	Sunday	Croydon Wake. Day & SAM1066 , Beaulieu
April 27 th	Saturday	SAM1066 , Middle Wallop (Cancelled)
May 5 th	Sunday	Southern Area Gala 2018/9 Odiham
May 25 th	Saturday	BMFA Free-flight Nats, Barkston Heath
May 26 th	Sunday	BMFA Free-flight Nats, Barkston Heath
May 27 th	Monday	BMFA Free-flight Nats, Barkston Heath
June 9 th	Sunday	BMFA 4 th Area Competitions
June 29 th	Saturday	SAM1066, Middle Wallop
July 21 st	Sunday	BMFA 5 th Area Competitions
July 27 th /28 th	Saturday/Sunday	East Anglian Gala, Sculthorpe
August 10 th	Saturday	Cagnarata day, Croydon/ 1066 Mid. Wallop
August 17 th	Saturday	Southern Gala, Salisbury Plain
September 1 st	Sunday	Crookham Gala, Salisbury Plain
September 15 th	Sunday	BMFA 6 th Area Competitions
September 22 nd	Sunday	BMFA 7 th Area Competitions
September 28 th /29 th	Sat/Sunday	London Gala, Salisbury Plain
October 6 th	Sunday	BMFA 8 th Area Competitions
October 12 th	Saturday	Buckminster Free-Flight Gala
October 13 th	Sunday	SAM1066, Middle Wallop
October 13 th	Sunday	Buckminster Free-Flight Gala
October 14 th	Monday	Buckminster Free-Flight Gala
October 19 th	Saturday	Croydon Coupe Day/ 1066 , Salisbury Plain
October 26 th	Saturday	Midland Gala, Barkston Heath

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 the website

www.SAM35.org

Useful Websites

SAM 1066	-	www.sam1066.org
Flitehook, John & Pauline	-	www.flitehook.net
Mike Woodhouse	-	www.freeflightsupplies.co.uk
BMFA Free Flight Committee	-	www.freeflight.bmfa.org/
BMFA	-	www.bmfa.org
BMFA Southern Area	-	www.sabmfa.org.uk
SAM 35	-	www.sam35.org
National Free Flight Society (USA)	-	www.freeflight.org
Ray Alban	-	www.vintagemodelearplane.com
David Lloyd-Jones	-	www.magazinesandbooks.co.uk
Belair Kits	-	www.belairkits.com
Wessex Aeromodellers	-	www.wessexam1.co.uk
US SAM website	-	www.antiquemodeler.org
Peterborough MFC	-	www.peterboroughmfc.org
Outerzone -free plans	-	www.outerzone.co.uk
Vintage Radio Control	-	www.norcim-rc.club
Model Flying New Zealand	-	www.modelflyingnz.org
Raynes Park MAC	-	www.raynesparkmac.co.nf
Sweden, Patrik Gertsson	-	www.modellvanner.se

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