

NEW Clarion

SAM 1066 Newsletter

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Editorial

Here we are halfway through the year, covid's grip is slackening a little and outdoor competitions are getting underway. I missed the 4^{th} Area, fathers day and two daughters visiting bringing gifts of great value kept me at home. Weather forecast did not help.

I've got one report from Beaulieu where five stalwarts competed. The power team maxed out so Crookham should do well for Plugge Cup points. Have not heard from Barkston, where I should have been. Weather was a bit miserable up here in the Midlands but I imagine the regulars would have been there.

Things looked a bit iffy for the publication of the New Clarion this month. I had most of this issue in the can as they say when my computer decided that it had had enough. I only back up my files once a month after NC issue so I would have lost most of my work and the thought of having to start again was somewhat sickening. Luck was with me however and it was only a power supply failure and a visit to my guru had a spare Power Supply stripped from an old computer of mine and installed into this one and we were up and away. Was I relieved.

This month we kick off with a report from Stew Cox on an event in New Zealand, mostly vintage R/C. I also have a wad of pictures from the same event which I will parade for you in the August issue.

The Pylonius piece pokes fun at the size of the rubber motors of the era, has a discourse on timekeepers eyesight and a final appreciation of the overworked club secretary.

More memories of mine. This time I reflect on my indoor association with 'Gyminnie Crickets', It's been my indoor model of choice for many years now, in fact there is a box containing my two lightweights sat on the floor in the lounge in front of the drinks cabinet, they have been there since I emptied the car for the 3^{rd} Area.

Peter Hall and Roy Vaughn report on the commencement of the Southern Coupe League with round one at the Southern Gala. Sorry about the picture quality, fuzzy seemed to be the order of the day but better than nothing.

Our secretary Roger supplied me with an Brazilian article on outdoor flying with super-capacitor powered models. Is this going to develop into yet another model class?

There are a few more of Bournemouth's John Taylor's stock of models, he's got many more to come.

I've popped in what is essentially a Vintage Model Co add for a new addition to their line of kits, A very lookalike Senator brought up to date. Would suit me not having any curves.

Roy Vaughn reports back on some flying of his 'Playboy Senior', sounds like it's going well despite a sticky D/T causing a rough arrival and serious adjustment of his Atom Minor motor mount.

There is a short report By Roger Newman on the 4^{th} Area comp at Beaulieu, fuzzy pic again as his camera battery gave up on the one picture. He did have a lucky find tho'.

Nick Peppiatt picks up, in his Shed Times 4 article, where he left off with his Cessna 195 Build. It's fascinating to me to see the lengths real modellers will go to to build their creations.

Roy Tiller is still dipping into our magazine archive and is picking out contents from some of the oldest copies we have on file.

Finally our secretary Rogers wraps up the issue with his Notes for the month.

Levin Vintage Event Report - 8 May 2021 - New Zealand

The Bob Burling Memorial Vintage Event is a long standing Levin Club event which is enjoying a resurgence in interest. Held at Levin on 8 May, the event was very well attended with 15 fliers recording times and six clubs represented. There were also a couple of sport fliers. Several supporters came along to help their mates and a number of spectators came specifically to watch the vintage events, some of whom went away enthused to complete vintage models to participate in the Levin events in the future. And missing from the great turnout were a few regular attendees! Numbers were bolstered by a strong contingent who made the day trip down from the Hawkes Bay. It was also great to see three attendees flying at the Levin events for the first time - Flemming Ravn and Bruce McKay from Palmerston North Aeroneers, and Ross Brinsley from Hawkes Bay.

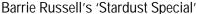
These Vintage events are all about low key fun and everyone seemed to enjoy their day.

After a lazy High had hung over the area for over a week preceding the event, it was clear from the forecasts that the calm weather would just hang on long enough for Saturday and then deteriorate. All flying was completed on the Saturday. That day the Levin Club Holfuy weather station showed a peak temperature of 21.5 degrees and a peak mean windspeed of 7 km/hr. It was flat calm at the end of the day when we locked up. Great weather for May! By contrast Sunday had a peak mean windspeed of 19 km frequently gusting up around 38 km/hr with light rain on and off all day. Just down the road at Kapiti it bucketed down all day Sunday with some minor surface flooding. Everyone had a good day Saturday and the decision to cancel Sunday proved to be the correct one.

There was a wide variety of vintage and classical models on display with over 30 models counted! Nine classes were flown, in part due to the excellent teamwork of the Hawkes Bay club fliers and their supporters getting through a large number of flights in a very relaxed manner befitting Vintage flying. Predominantly flying electric models also enabled rapid turnaround between flights by the Hawkes Bay boys and others.

Vintage Precision was the most popular with 14 participants. Barrie Russell and Bryan Treloar made the fly-off with a Stardust Special and a Red Zephr respectively, Barrie winning only 5 seconds off a perfect fly-off flight.







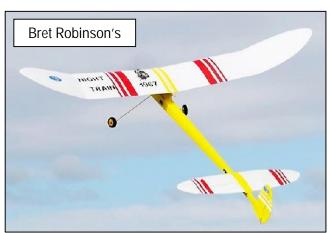
Bryan Treloar & 'Red Zephr'

Wayne Elley, Flemming Ravn and Bruce McKay all flew very well missing just one spot and took third, fourth and fifth in that order with very close scores. Flemming was particularly unlucky with his beautifully built Kloud King running through the spot on his last flight. While the fuselage was within 15 metres of the spot, unfortunately the nose to which the spot distance is measured was outside.....

In Duration, Barrie Russell stood out with his Vintage E-Duration score. Barrie flew his Stardust Special very well to max out and then made a fly-off flight of over 7 minutes plus spot.

Stan Nicholas showed the way in Classical Precision with an excellent score only one second off perfect. This was a Hawkes Bay Night Train benefit - great to see these beautiful elliptical tipped models of George French's 1968 World Champs FAI Power design floating around the Levin sky.









Vintage $\frac{1}{2}A$ Texaco is an endurance class flown with Cox Babe Bee powered models to an 8 minute max with spot landing. Stew Cox and Bryan Treloar both had their standard Cox Babe Bees on song - Stew's shortest motor run was 7.30ish and best 7 minutes 45 seconds. Key to this class is using a large slow-fly prop with just enough revs to enable the model to slowly climb while extending the motor run to times two to three times that which we got out of Cox Babe Bees in our youth.

Brett Robinson put up an excellent time with his Stardust in Vintage 1/2E Texaco including a $14\frac{1}{2}$ minute flight. This event has no max and is all about making the most efficient use of the limited battery capacity.

Vintage E Rubber was fascinating viewing. Barrie Russell flew his Voodoo making two very respectable flights of 26 minutes and $16\frac{1}{2}$ minutes to win narrowly over Stan Nicholas with his lightweight Gollywock.

Stan had a stunning second flight two seconds shy of 33 minutes and his spot landing was dead centre, a great way to finish the day before the Hawkes Bay contingent headed back home.

Barrie Russell had an impressive day winning three of the four classes he flew, two of them with excellent fly-off scores.

While there were some excellent scores, the day will be remembered for the great variety of vintage models flown in perfect conditions in a leisurely low key fun day.

Thanks to Ross Gray and Brett Robinson for



	Windows Danaining		Results:			
1.	Vintage Precision Barrie Russell	Hawkes Bay	Stardust Special		1940	600 + 195
2.	Bryan Treloar	Ashhurst	Red Zephr		1936	600 + 191
3.	Wayne Elley	Kapiti	Miss America		1936	591
4.	Flemming Ravn	PN Aeroneers	Kloud King		1938	589
5.	Bruce McKay	PN Aeroneers	Red Zephr		1936	588
6.	Stan Nicholas	Hawkes Bay	Stardust Special		1940	585
7.	Barry Hall	Wellington	Buzzard Bombshell		1940	579
8.	Stew Cox	Levin	Brooklyn Dodger		1941	574
9.	Ross Brinsley	Hawkes Bay	Flying Quaker		1936	571
10.		Kapiti	Mercury		1938	541
11.	3	Wellington	Corsaire		1945	505
12.		Ashhurst	Quaker Flash		1937	439
13.		Kapiti	Buzzard Bombshell		1940	373
14.	John Ellison	Kapiti	Mercury		1938	338
	Classical Precision					
1.	Stan Nicholas	Hawkes Bay	Night Train		1968	599
2.	Barrie Russell	Hawkes Bay	Night Train		1968	572
3.	Brett Robinson	Hawkes Bay	Night Train		1968	542
		,	3			
	Vintage IC Duration					
1.	Wayne Elley	Kapiti	Miss America		1936	596
2.	Terry Beaumont	Kapiti	Playboy Senior		1940	260
	Vintage E Duration					
1.	Barrie Russell	Hawkes Bay	Stardust Special		1940	960 + 461
••	Burno Russon	namos baj	otaraast oposiai		1710	700 . 101
	Classical E Duration					
1.	Brett Robinson	Hawkes Bay	Night Train		1968	817
2.	Stan Nicholas	Hawkes Bay	Night Train		1968	755
	Vintage 1/24 Tayoos					
1.	Vintage 1/2A Texaco Stew Cox	Levin	Playboy Senior		1940	1490
1. 2.	Bryan Treloar	Ashhurst	Rambler		1940	1490
۷.	Бгуан пенна	ASHIUISI	Kalliblei		1939	1400
	Vintage ½E Texaco					
1.	Brett Robinson	Hawkes Bay	Stardust Special		1940	1576
		,	•			
	Vintage Open Texaco					.=0.
1.	Bryan Treloar	Ashhurst	Lanzo Airborne		1938	1586
	Vintage E Rubber					
1.	Barrie Russell	Hawkes Bay	Voodoo		1949	2588
2.	Stan Nicholas	Hawkes Bay	Gollywock	1	939	2468
۷.	Stari Monoida	Hawkes bay	Conywook	'	, , ,	2700



Extract from Model Aircraft July 1952

A Painfull Twist

Challenged to find a twist to the subject of a new electronic gadget for counting the turns being applied to a rubber motor I can only feebly reply by pointing out that mechanical aids for this purpose are now wholly superfluous. Rubber motors have now assumed such gargantuan proportions that it Is no longer necessary to record the turns numerically; the system now in vogue is that of "progressive paralysis," This originates In the right wrist to indicate quarter turns, benumbs the shoulder blade at half turns, and arrests any further motion of the body at three-quarter turns, Any superman venturing beyond this point will immediately be aware when he has reached full turns by the only purely scientific means of determining this critics! stage; the snapping of the rubber motor.

Invisible Assets

In describing a new system of timekeeping a writer to this journal states that "every person is credited with the average eyesight and the average visibility."

Well, I can't say that I too much object to being credited with the average eyesight. We, in our timekeeping capacities, never do quite come up to that eagle-eyed standard which the competitor invariably expects.

And, be we longsighted or nearsighted, we must all at times suffer his sarcastic comments on our feeble visions. This we accept, although they do come it a bit much now and again, especially when, upon meeting you in the street a few days after the contest, they solicitously offer to escort you across the road,

But as far as the average visibility Is concerned, that's quite another matter. In all conscience I cannot feel that I am entitled to anything less than full visual solidity. There are certain gifts and secrets which are too rare and precious to share, and one of these is the ability of rendering oneself completely invisible when there's a job of timing to be done. By what strange alchemy certain types are able to effect a sudden and complete disembodiment at such critical times I am at a loss to know, but I think it would be grossly unfair not to allow them the full value of their magical powers.

Official-ease

In the bad old days of ease and simplicity, before we became overwhelmed by the complexities of modem life, the whole of the model club's responsibilities would be borne with a cheerful nonchalance by the club's one and only official: the club secretary. In these bureaucratic days, however, he is flanked on every side by an impressive array of dignified officials who in the very nature of modern officialdom, in no way relieve the secretary of his many responsibilities. Rather are they the very reason why he can no longer bear them with that same cheerful nonchalance.

The said, officials, briefly described, are:

The Club Treasurer,--The bloke who grudgingly collects the subscriptions when the secretary's away, and who knows enough of the club's finances to be amazed at the secretary's skill in handling them.

The Competition Secretary,--The bloke who botches up the comp. entry form, and who is always thankful to learn that the secretary has filled it in and sent off the spare-copy.

P.R.O.--The bloke who forgets to send in the club report when the secretary is too busy to do it himself.

The Committee,-- Ideally this should be broad-based, representing the club at all levels of age and interest. Most often it is broad-based through sitting about and watching the secretary do the work.

In the average club this formidable collation of officials invariably leaves one rather disgruntled member without any title to hang his hat upon. Fortunately, club secretaries are not without, imagination. If the member is of the young and skittish variety he can be given the role of Assistant Comp. Secretary or, perhaps, joint P.R,O. If, on the other hand, he is of a more aged and dignified genre there is always the quite honorary capacity of chairman! to fall back upon.

Corny Corner

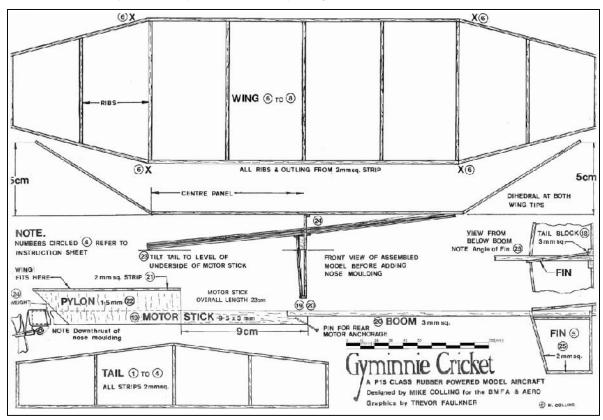
At this time of the year there always crops up the usual crop of warnings about crops, and the farmers are busily engaged in chasing this year's crop bashers off their crops with hunting crops.

Why the average aeromod should have such scant regard for the produce of his native soil I don't know, but his particular aversion to corn does, perhaps, explain all those unpleasant remarks I get about this column.

More Memories: Gyminnie Crickets

John Andrews

It was around 2007/8 when the Indoor Technical Committee decided to promote a postal event for a lightweight version of the BMFA 'Gyminnie Cricket'. The only rule was that the model must adhere to the published planform, everything else was builders choice.



The indoor flyers took up the challenge and soon were building models with airframe weights well under 2gm. Indoor maestro the late Laurie Barr produced one weighing 1.4gm and flying in the No1 shed at Cardington did a flight of over 14 minutes.

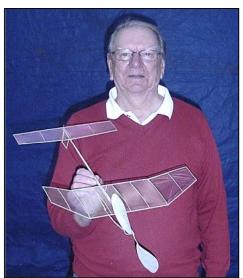
The problem with Laurie's model was that he had increased the size of the tailplane and did not qualify for the postal competition.

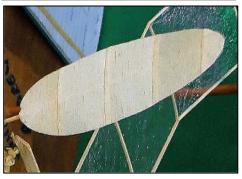
The I.T.C. decided to add the light 'Gyminnie Cricket' to the National Championships. A minimum weight of 3gm was introduced, presumably due to the postal competition not appealing to novice flyers due possibly to the super light models built by experts.

If I recall correctly it was 2008 and the event was won by John Taylor, I managed 2^{nd} . It was John that was using a prop made from razor plane shavings and I managed to make one or two props in the same manner saving around 1/4qm weight.

I managed to keep my lightweight 'Gyminnie Crickets' down to 3gm and was quite competitive at the Indoor Nationals for quite a few years, winning and placing most years.

I have a few certificates to paper the workshop walls with.





The late Dick Twomey was president of the Mauritius Aeronautical Society and one of his initiatives was the running of an aeromodelling competition between schools on the island. I cannot recall the details but each school had to design a glider and then on a competition day launch the model from a spot half way up a stand in a football stadium. The longest distance flown decided the winners. I think each school had four attempts. After a couple of years Dick



contacted me and asked what I thought of him using the 'Gyminnie Cricket' for his competition and wondered what design improvements he could ask schools to implement. I wrote the following reply:

Dick, Gyminnie Cricket Info (all my opinion based on my records) As far as competition goes, nationally there are only two classes:

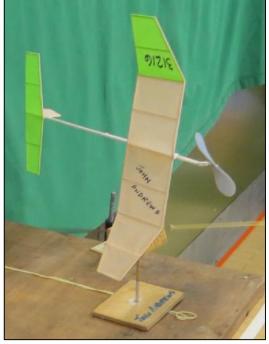
-) Standard Kit Cricket, no mods.
- 3 gram lightweight, only specification is that the GC planform is adhered to and weight of airframe without rubber must exceed 3g.

B'ham club and I assume others allow variations for club competitions but nationally it's just the two types above.

The 2015 Xmas competition at B'ham was for standard Kit Cricket (KC), ie. Built to plan with commercial plastic prop (excluding Ikara butterfly prop). Tissue covered (I used craft tissue from the 'Range' stationary store on GCIII). The 2mm wood requirement was semi ignored if scratch building and 1/16 stripped to 2mm was what I used. Significant down-thrust seemed to work best.

A normal KC will come out about 9 to 10 grams and my two versions in Nov that year were comfortably clearing 1min on rubber from .1" to 1/8th wide of various loop sizes. Best time was 1-28 using .110" x 14" loop with 1.400 turns, using KC I, under Thorns 29ft ceiling. I did not record model weights. I was trimming L/H circles.





KCI & KCII KCIII

I built a lighter one, KCIII for the Dec meeting and best two times which won the comp, were 1-34 & 1-45 using .080" x 18" loop and 1,900 turns.

For 2016 Colin Shepherd has reworked the design to increase performance, see current New Clarion. Lifting wing section, larger tail-plane and Plastic prop including home-made and Ikara.

I have 3 again, ID's CRI, CRII & CRIII, the lightest is under 6gm but Alan Price has one weight 4gm and has done 2.20 at Thorns, using I believe .060 rubber.

I am having trimming difficulties, got mine set up all wrong, left turning with R tail tilt and R side thrust. Have been busy resetting for RH flight, slight side-thrust and small wash-in on RH wing and slight tail-tilt. Remains to be seen what happens next weekend.

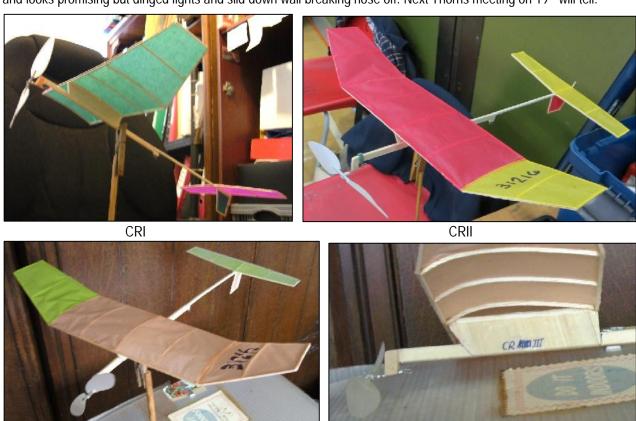
I did get a 2.10 with CRIII using .070" x 20" loop motor 2,200 turns last visit but flight was a nightmare starting off left then straight before settling into RH pattern. Hopefully resetting will stabilise patterns.

I believe best performance is with R/H flight with slight R sidethrust, R washin and R tail tilt. Build with wing fitted on RH side.

Colin Shepherd has a really light one flying R on .055" and even down to .045" rubber.

I believe we are all using the Ikara props, a couple have tried larger home-made props but seem no better.

My CRI & CRII wings have 5% curve and the other, CRIII, is using Hanger-rat profile. I test flew III at Sneyd last weekend and looks promising but dinged lights and slid down wall breaking nose off. Next Thorns meeting on 19th will tell.



CRIII showing Hanger Rat aerofoil

As always lighter is better, uses thinner rubber with more turns. Using clean white wood will make a 6gm model easily, but going lighter takes time with wood selection.

Could build lighter if wood x-section was allowed to be reduced but not as our design rules stand at this time. Yet to try bigger homemade prop.

The BMFA 3gm 'Gyminnie Cricket' is another story

These must be built to planform only, everything else is up to the builder's preference, including covering material. Models can be covered with Wilco Economy Foodbag plastic, my early one was 4qm.

The wing may be raised on wing-posts allowing the dihedral to be significantly reduced to give more lifting area.

Wood sizes reduced, tapered main and tip spars, 1/32 sq tail-plane framework, big balsa prop and covered with Mylar (OSFilm).

These models will do 4min flights in sports halls

and 6mins under 60ft or so ceilings. I won 2016 Nationals with a two flight total of 12mins+ flying in the old Brabazon hanger, Filton.

Motor was .090" x 18" loop with 1,600/1,500 turns.



The reason for the sheet fin is that, when first built, additional weight was required to get up to 3gm. Both my current models are now well overweight due to lots of repair and recovering work. They are 5 & 6 years old, I first won the indoor nationals at Boulby Potash Mine venue in 2010.

Best flight 8.28 in Cardington.

The really important feature is the 12" dia balsa prop, wide blade set 40deg at hub (it's actually 50deg to prop shaft but 40deg on pitch setter).



Another variation is one with Polystyrene wall foam flying surfaces using natural curve off roll for aerofoil.

Wing has three ribs, one in middle and one at each dihedral break. These are used to secure a wing support spar back to the bottom of wing post.

This model will do 2.45min in sports halls and did 4min+ at the Manchester Velodrome back in 2008.

Motors .110"/.115" x 14" loop with 1,400 turns.

Once again it is the big dia. prop that makes most of the difference.

Well that ought to give you something to think about.

I would suggest you make one competition for standard unmodified Kit Crickets and couple it with a design improvement model and somehow integrate the two duration times to produce winners.

If you use different venues there is a complicated height adjustment formula you could use, but if all are fairly standard sports halls it may not be necessary.

Allowable improvements could be: Aerofoils, Props, and wood sizes. I don't think covering in mylar would be advisable as it is not straight forward, nor easily obtained and is expensive.

Anything that needs amplifying or explaining you know I'm on call.

Best of luck,

John A.

Dick did not implement the change to Crickets for his schools competition at that time. I assume that the logistics of supplying kits and/or balsa wood together with props and rubber to the schools on the island was too much of a task to sort out.

Back to my own Crickets, I won the class at the 2016 Indoor Nationals in the Brabazon hanger with the luckiest flight you could imagine. They say there are no thermals indoors but I found one. The competition is a best two from six and I was a few seconds adrift from Ron Marking at the halfway stage. It was the second day and I broke my cricket motor winding and instead of fiddling about finding & testing another I shortened and



re-knotted the broken motor. Using the same turns I launched and the model flew straight into the floor, no flight. Bending motor stick I thought.

Without rewinding I launched again and model got away clean climbing swiftly up to the roof girders. There were two girders in the roof just a bit further apart than my models turning circle and suspended from these were four tungsten lights forming a square, once again just larger than my turning circle. My cricket flew up into the middle of this gap and after a couple of girder rubs settled down central between the girders and just above the lights. The warm air, or indoor thermal as I called it, kept my model circulating there for best part of one minute before the let-down started. Recorded 6-50 a minute better than my average flights. I wound and flew again but just my standard 5-48. Talk about a lucky win.

I've still got my two crickets but they must be about 4gm these days as I've had to fit new motor sticks. I'll need a new model if I want to win at this year's Nationals

Engine Analysis: Allbon Sabre 1.45cc - Aeromodeller Annual 1956-57

Retail Price: 67/5 (including P.T.). Displacement: 1,457 c.c. (.089 cu. in.)

Bore: .519 in, Stroke: .420 in.

Bore/Stroke ratio: 1.24:1.
Bare weight (with tank): 3½ oz.
Max. B.H.P.: .104 at 13,300 r.p.m.
Max. torque: 10.3 oz.-in. at 7,000 r.p.m.
Power/Weight ratio: .032 B.H.P. per oz.

Power rating: .0715 B.H.P. per c.c.

ALLBON SABRE
1.45 c.c.

Manufacturers:
Davies Charlton Ltd.,
Hills Meadows,
Douglas,
Isle of Man.

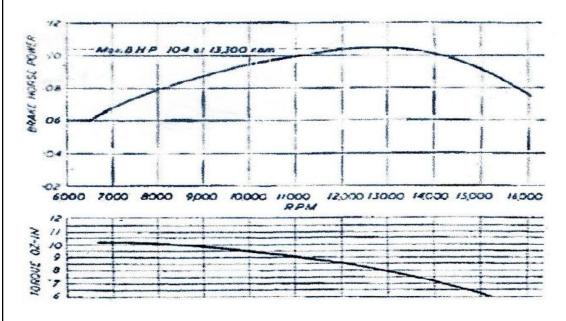
Cylinder: Mild steel.
Contra-piston: Steel.
Piston: Cast iron.
Connecting rod: Drop
forged light alloy.
Crankcase casting:
Pressure die casting
in light alloy.
Crankshaft: Steel.

Bearing: Plain.
Cylinder jacket: Light alloy, anodised red.
Spraybar assembly:
Brass.

Tank: Transparent plastic, integrally mounted.

Spinner nut: Light alloy, anodised red.

PROPELLER	R.P.M.		
dia. pitch	Allbon diesel fuel	Mercury No. 8	
8×8 (Stant) 8×4 (Stant)	6,400	8,800	
6 × 6 (Stant) 6 × 4 (Stant)	11,200 13,300	12,950	
8×5 (Stant) 7×4 (Stant) 8×3	7,800	7,800 11,600	
(constant g.m.p.)	10,200		
(constant g.m.p.) 6×4	13,400	-	
(Frog nylon)	15,000		



Aeromodeller Annual 1956-57

The London Gala. Salisbury Plain, 30th May 2021 Southern Coupe League Round One



The sun slides behind the trees to the West. The light fades. Perhaps a cooler breeze is stirring. The Dartford Warblers settle in their secret nests. The Gala is over and the competitors are heading home.

Alan Brocklehurst heads West to Sherbourne
Alan has won the coupe event, the only one to max out.
Later he writes:

After a bit of a late start I was fortunate to do so well, especially as I suffered the inconvenience of breaking 3 motors. The tracker also played up, though changing from C-03 after the first flight so I could take advantage of the RDT in C-04 helped to save the day - even so I felt to be 'running to catch up' and really didn't think that I would have the time to do all 5 flights (someone said that Tony



Winter's fourth flight was in a boomer and he couldn't get back in time). I think some of my 'new' rubber has been slowly ageing in lockdown! Some seems to be quite torquey but doesn't take the turns, even on a warm day!

Thanks to Martin Stagg for timing for me. His model was a bit off-trim and he missed the air on his first flight and he too had problems breaking a motor and damaged his model. In retrospect, I reckon that he did me a favour in suggesting I moved along to fly at the other end of the line from where I had originally parked. In doing so we also moved away from the trees which may have made thermal picking more difficult for Roy and Gavin. Anyway, whatever the reason, I was lucky to have good air each time.

Roy Vaughn is heading Northeast to Crowthorne, Berkshire.

He came second, later he writes:

As usual for Coupe, proceedings were heavily influenced by the weather. Lots of lift about, wind about 12mph all day but brief calm spells. Flying from east side of trimming field immediately downwind from trees. Trees generated a lot of rollover and turbulence which extended a long way downwind. As a result there were lots of drops despite the otherwise good conditions. Good entry for these days including the contingent from CVA (presumably fleeing the tourist hoards on Cornwall). Also a few new names. My second flight forced into ground from good height a third of a mile downwind from trees.

Gavin (Manion) doing well as usual until last flight.

Alan (Brocklehurst) set up camp at the southern end of line beyond the end of the trees and managed to avoid the rollover til the end.

Richard Fryer tied with Ron Marking for third.

Organiser announced a new innovation, a fly-off for 3rd place, but Richard had gone by then. Ben Hobbs nearly lost his new model with DT failure, had the only new feature (seen today) front third of wing top surface covered artificial snowflakes for turbulation, very good glide.

Gavin Manion heads North to Birmingham.

Later he writes:

Snatched defeat from the jaws of victory!

I put it down to technology as I used a thermistor for the first time in ages. My last flight coincided with a period of "the doldrums", drooping mylars, nothing...but a thermistor which inexorably clicked upwards...

I though "well this has to be lift doesn't it?"...it wasn't. With more experience I would have waited for the breeze to pick up but I've only been at this coupe game for about 13 years so I'm still a novice.

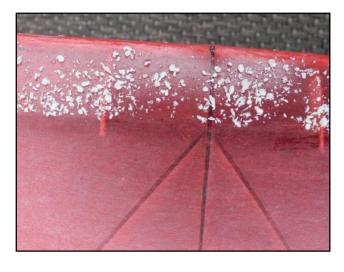
Without a thermistor I would never have flown but would have waited for the mylars to start rising and flicking...or at least I like to think that I would.

It's a great game we play, bring on the next comp!.

Jim Paton. Ben Hobbs and Richard Fryer head north north east to Oxford. Later Jim writes:

I made 3 maxes but it needed gradually increasing right rudder. Not sure how that could be with a carbon model made up of Bukin parts. My weekend highlights were more the retrievals.

Ben Hobbs was flying his new high aspect ratio coupe with crushed polystyrene turbulation. It flew so well it disappeared over the airfield into the wide blue yonder after a dt failure. Ben being Octogenarian was not keen to jump hurdles and wander miles. I finished early and fancied a walk through the surrounding countryside. Chris Redrup calculated the line of flight on his map. I was not hopeful till I got a signal after half an hour and this continued to lead me to the model sitting on the ground just beyond a menacing group of trees. Sometimes you get lucky. A satisfying end to a day's flying.



Richard who shared third place with Ron Marking, Writes:

It was a good day, sunny and breezy, lift was not easy to pick with lots of dropped flights in Coupe, even by big names, Gavin Manion was doing well with a string of maxes as I left around 3.45pm. A hedge row behind the flight line made it difficult to tell between thermals and turbulence when using streamers. With the breeze the models were flying quite far when in lift and longish grass made spotting models on retrieval sometimes difficult. The wind direction was opposite to the usual direction and there was a steepish valley to the right of the flight line meaning models could continue flying for a while after dropping out of line of sight into the valley and the steepness of the valley meant trouble for some in picking up tracker signals. Attendance was good and the numbers in coupe was really pretty good. All in all it was great to be flying again on a good day weather wise.

Phil Ball is driving North to Derby.

Later he writes:

Had a bit of a bad time, trim flight did 5mins then managed to pick 2 bad patches of air so I gave up and flew HLG\Cat.

Ron Marking, A. Winter and C. McKenzie head West to Cornwall.

All were pleased to see Cornwall C.V.A. and hope to welcome them to future League events. You will see from the table that a full League programme has been restored by adding the Nationals and the SAM 1066 Cagnarata Day after La Grande Coupe de Birmingham and the Second Area were Covidised. So there is plenty of opportunity for all. The next event is at the Fifth Area on July 11.

P.S. I was unable to attend the Gala so I had to choose between a fictional account, which was tempting, or taking on a sub-editorial role and inviting contributions which editors John A. and Ian K. would I guess, certainly prefer.

You'll have to guess which I chose.



Staggs on Salisbury Plain

London Gala - Results

London Gala						
	Entrant	Club	Maxes	Lg. Score	Time	
1	A.Brocklehurst	B&W	5	17	10.00	
2	R.Vaughn	Crookham	3	12	9.42	
3	R.Fryer	Oxford	3	11	9.28	
4	R.Marking	CVA	2	9	9.28	
5	G.Manion	Birmingham	4	10	9.23	
6	J.Paton	Crookham	3	8	8.24	
7	A.Winter	CVA	4	8	8.00	
8	B.Hobbs	Oxford	2	5	4.00	
9	P.Ball	Grantham	0	2	2.55	
10	M.Stagg	B&W	0	1	1.06	
11	R.Elliott	Croydon	0	0	0.46	
12	C.McKenzie	CVA	0	0	0.46	
13	D.May	Timperley	0	0	0	

Southern Coupe League Table after Round 1

	ENTRANT	CLUB	LONDON	FIFTH AREA	CAGNARA TA	SOUTHER N GALA	NATIONAL S	DREAMING SPIRES	CROOKHA M GALA	COUPE EUROPA	TOTAL
1	A. Brocklehurst	B&W	17								17
2	R. Vaughn	Crookham	12								12
3	R. Fryer	Oxford	11								11
4	G. Manion	Birmingham	10								10
5	R. Marking	CVA	9								9
6	J. Paton	Crookham	8								8
=	A. Winter	CVA	8								8
8	B. Hobbs	Oxford	5								5
9	P. Ball	Grantham	2								2
10	M. Stagg	B&W	1								1
11	R. Elliott	Croydon	0								0
=	C. McKenzie	CVA	0								0
=	D. May	Timperley	0								0

Coupe League Fixtures 2021 (V4) - 2/6/21

Date	Competition	Location
30 May	London Gala	Salisbury Plain
11 July	Fifth Area	Area Venues
25 July	SAM 1066 Cagnarata	RAF Colerne
15 August	Southern Gala	Salisbury Plain
5 September	Nationals	Salisbury Plain
9 September (midweek) (tbc)	Dreaming Spires	Port Meadow
18 or 19 September* (tbc)	Crookham Gala	Salisbury Plain
9 October	Coupe Europa	Salisbury Plain

^{*} Final decision based on weather forecast

Outdoor free flight with supercapacitors

Alexandre Cruz, Sao Paulo, Brazil

Introduction, first steps

I was introduced to supercapacitors a long time ago by toy Free Flight model airplanes that could barely fly, so I was never interested in them. This year I have met Dr. Eder who has shown me that supercaps were being used in Free Flight indoor models with quite good success and presented me a motor and a capacitor (for indoor use). After some tests I realised the capacitor had enough energy to propel an outdoor model at a reasonable height.

I went online and joined the drone frantic development rate, purchased some 7mm diameter motors including geared versions and a couple of 3V 10F supercapacitors.

I believed the power setup would be enough if the model was kept light, below 30g. This looked very reasonable, considering this power set up weights 8.8g, being 3.1g for the capacitor, 5.5g for the geared motor and prop and 0.2g for wiring. Since E20 models have a minimum of 30g flying weight, of which nearly half are electronics, and 20in wingspan I decided to build a model to the same size as test bed. I opted for a modified *Neutrino* from my friend Omar Grassetti. It ended up weighing 28g RTF, using the geared motor, and was completely made of 1mm balsa sheets, see Figs. 1 and 2.

Trim was easy and flight performance was better than I could anticipate. Climb was OK and the long discharge curve provided a long glide. However, as discharge hap-



Fig. 1 A modified Grassetti Neutrino was the first choice



Fig. 2 Easy to build all-balsa structure of the Neutrino

pened it was obvious that the large spinning prop created too much drag and thermalling would suffer. Unfortunately, I lost the model OOS by widening too much the left turn radius as wind picked up in the first flying session.

Happy with *Neutrino* results, I was determined to find a direct drive solution that would improve glide performance, while maintaining the climb height of the geared motor. It was clear to me I had to reduce guess-work from the first attempt, so I setup a bench for testing.

Bench test of the capacitor/motor choices

The test bench provided thrust measurement by the pressing a 0.1g precision scale using a "C" shaped beam. Capacitor is charged using a DC-DC power supply and its voltage is measured by a dedicated voltmeter. When the capacitor voltage reaches 4.1V power supply is disconnected, 5s delay is set and motor is started while filming the whole test for data acquisition. Even though rudimentary, this setup gave me precisely the information I needed.

Testing made obvious that capacitor voltage is reduced very quickly after motor is started so I need a motor that could perform well mainly at low voltages (ranging from 1 to 2.5V). A combination of a low resistance motor and "large" propeller would be best to harvest as much energy as possible. Hence, I abandoned the 7mm motors and went for the hottest 8.5mm motor I could find.

Eachine 8520 Racerstar was the one that came first so did the 65mm Kingkong propellers. Racerstar motor weighs 5.3g, internal resistance is 1.6 Ohm and Kv is 14500 RPM/V, while ordinary motors Kv of the same size are around 10500 RPM/V. I bench tested it and got the following results for static thrust, with a Vinatech 3V 10F capacitor charged as described, see Fig. 3.

Considering test bench limitations, results were excellent and show, as predicted, thrust not being perfectly exponential due to motor inductance variation. It is relevant to point out, static thrust is larger than 25g for the first 5s which should result in an exciting initial climb. In addition, the low resistance motor discharges 66% of the capacitor energy in the first 15s of flight so climb and glide strategy should happen.

I then tested the capacitor discharge to a resistive load of 1.5 Ohm and checked how voltage varied after power source removal, see Fig. 4.

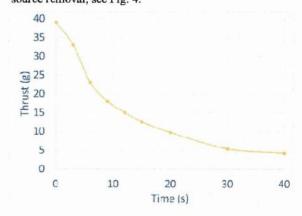


Fig. 3 Variation of motor thrust with time test.

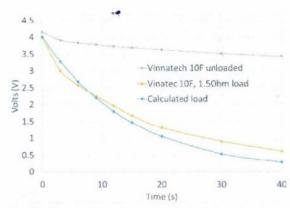


Fig. 4 Motor voltage decrease with time, bench test

Imperfections of the test setup are clear if the calculated load curve is compared to the measured loaded curve. On the other hand, this test revealed self-discharge at 4.1V is relevant if maximum performance is desired but still very manageable if sport flying is the goal.

Excited by the results, I quickly put together a micro Starduster by reducing the original plans to 20in wingspan and making some adjustments to wing chord and motor mounting.

Building the Micro-Starduster

There are no secrets or special techniques for building this little marvellous classic. In fact, very little material is required being parts of 4in wide sheet for each size: 1/32in., 1/16in., 3/32in. and 1/8in. In general, C-grain and light balsa are preferred for most parts.

All the construction was made directly over the plan, which is part of this article. Wing design is straight forward and relies on a single spar. Wing tip is tilted 45 degrees, and dihedral breaks are secured by butt joints at the spar, leading and trailing edge reinforced by gussets. No warps are purposely built to it. Tailplane is even simpler and should be kept light.

Fuselage is composed of two 1/32in. sides, a 1/8in. pylon and two 1/8in. x 3/32in. longerons. Nose is solid balsa and two 1/8in. cheeks are added for motor support. Capacitor is mounted directly to the bottom of the fuselage. CG is located 70mm from the leading edge.

Wiring is very simple as the negative pole of the capacitor is soldered to the motor, while a small switch is soldered to the capacitor positive tab and then to the motor. Charging is done directly to the capacitor tabs using an IC hook up clip while the switch is off to prevent motor numerous properties.

In my case, structure came at 11g and I covered it with Oralight which increased weight to 18.5g. I then installed a viscous timer DT and finished the model at 28g (would be easy to be at 25g with a better choice of covering material), see Figs. 5 and 6.

Trimming and Flying

Flying was spectacular. Trimming the glide was easy and low power flights had shown that I needed a little up and right thrust, which was obtained by installing wedges in the motor housing. I gradually increased the power as no trim changes were required. Full power was reached after 10 flights.

Full power means I am charging the capacitor to 4.1V as starting voltage by setting the power supply to 4.5V. Climb is great, with thrust larger than weight for the first few seconds. After 20s, climb is negligible, and transition is very smooth. As the capacitor discharges a

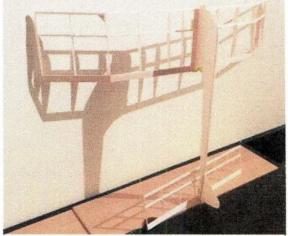


Fig. 5 The completed structure of the Micro-Starduster. Simple and very light.

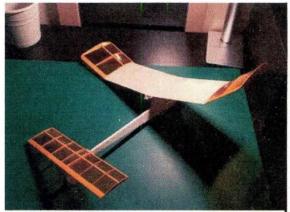


Fig. 6 The completed ship, transparent covering in stab and wing-tips.

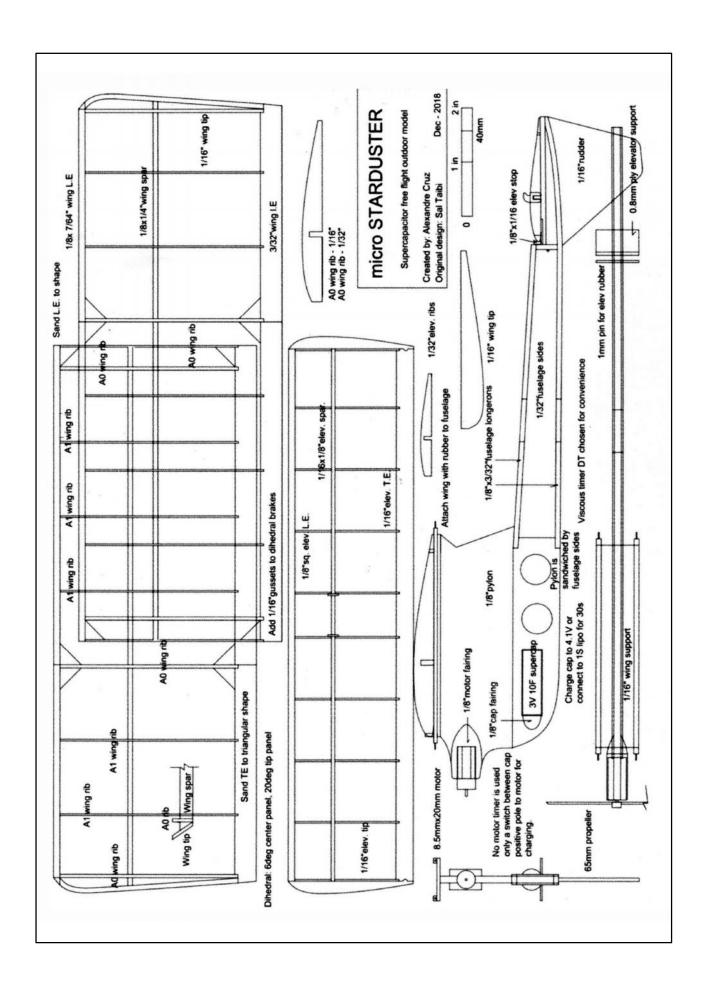
the model transitions smoothly into its final glide attitude. So far, my best flights were around 110s in dead air with this setup. You can see some of the flights at:

https://www.youtube.com/watch?v=cvHjXSXIYK4

For fun's sake, I tested the model with 15F capacitors. They are 1.4g heavier than the 10F version but the climb is much higher, performance is awesome. In my case, performance is a little too high for my home field as dead air flights approach 160s.

I cannot stress enough how great was the surprise of having the possibility to fly Free Flight power models without motor timers. The new power sources open the way for enjoyable, inexpensive but competitive E20 size models, (let's call them C20s?). These models can have an enormous number of combinations of new drone motors and capacitors to power a range of intended applications.





Alexandre Cruz (Brazil)

Letters to the Editor

James Woodside:

Tony's Popsie: Congratulations and a small dose of envy.

I did mention that I have seen the portly one cruising the air at Old warden. Is this a punishment for some earlier mis-demeanor?

I am glad to report that the renovated 'Jenny' mentioned in these pages has at last made its new maiden flight. The model was guided by my friend Tony Pritchard, quite a dab as a pilot. Given that the fitted OS 40FS must have been putting out considerably more power than the original engine (Brown Junior?), the model took a considerable run before lifting



off into a gentle climb. The rudder response was also slow.

My original airframe had zero zero rigging angles. The trim was. apparently, arrived at by progressively moving a piece of 1/4" sheet away from the tail TE until a glide was achieved . My renovation used a wedge under the wing giving about 3 degrees of positive with the tail at zero. Ninety thou, has now been put under the tail to help with the trim. It is possible that opting for a single elevator on the left side has given insufficient authority. Further flights will tell. Once aloft, the model has a stately air. Well worth the considerable time and effort involved in the renovation.

Should I attempt a second Popsie? I feel that the very wide bodied Jenny will fulfil both purposes. Is that a No? Yes!

James Woodside

Simon Dixon:

is 💝 feeling tired.

Great days flying on Salisbury plain today ($Sat. 29^{th}.May$), calm and warm. I managed 3rd in power and 4th in glider so not a bad day, just hard work - 27,000 steps. Fed and watered at the camp site, now ready to do it again tomorrow.





Simon Dixon

Models Galore: Pt.3 - John Taylor

Penumbra tale:

After reading Roger Newman's mention of the Southern Cross Club and their flying wing models I distinctly remember that picture of them posing with their giant gliders. See NC March 2018 for more history of that group.

I decided to build a Penumbra. I needed to get some advice on how to DT the model. I contacted Dave Dent who was well into Flying Wings. He suggested either a parachute DT or a weight on a line attached to the wing tip and released from a compartment in the fuselage. The third option was a spoiler.

I chose the weight on a line as the easy option. After trimming by adding a small amount of nose weight the time had come to test the DT. The tow up was dead straight. Soon after release the Tomy tripped and the 30 gm weight on 25ft of thread dropped out.

The model started to turn tighter and tighter until the weight was swinging in a wide arc under the model, the thread managed to pass over the wing and slid aft between the fuselage and wing root and came to rest at the front of the wing tongue. This was the position of the CG. The flight pattern settled down and the model landed.

After that I shortened the thread to about 6ft.

The model was lost at MW and was never found...

Point of order, the pictures here are of the Penumbra after conversion to electric power. Note the addition of a fin with a high tail to give rudder and elevator.





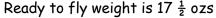
'Penumbra' after electrification

Short Seamew

Only about a dozen to go.

This model is of the Short Seamew. Its quirky shape appealed to me. This plane was designed in 1951 as a submarine spotter. It was powered by a Turbo Prop engine with the pilot and observer sitting directly above it. Only24 were built.

My model is 39ins span. I increased the tip chord a little as they looked too pointy. Power is a brushless motor turning an 8×4 prop giving 45 watts. I will up the pitch to 6" to give a better reserve of power.





Farman Mustique

This model is a French light aircraft.

The model is 39ins span, powered by a small pole and stator electric motor turning an 8×4 prop giving 40watts which is more than enough to take off and climb at a safe rate.

It also glides well. The R/C gives motor speed, rudder and elevator.



Veron Cresta and Skyscooter

The Veron Cresta and the Skyscooter were both built by Martyn Pressnell. We tried unsuccessfully to fly the Skyscooter several times. Each time adding more noseweight. Just before he passed away in April 2017 he gave me the model. After his death I persevered to try and master it but all ended in a massive stall which dismantled the nose back to the leading edge. At this point I found that the cowling was lead lined to try and get the CG forward. Martyn's craftsmanship was always first class but in this model the distribution of the radio gear and battery needed to be altered. I decided to extend the nose by 3" to start with and after shifting everything that could be moved as far forward as possible I was able to remove some of the noseweight.

The model was now 3 ozs lighter.

The model now flies well although fast.

The model now joins my `Memorial Flight` along with the Thunderking and Miss Philadelphia. All models I am proud to own and fly in memory of their designers.

The twin fin Cresta was a 38" sport free flight Performance Kits model designed by Martyn and kitted by PK.

Martyn had produced this electric R/C version. His wife gave me the model as a thank you for helping dispose of his gear.



Martyn was a very innovative engineer.

He designed the Toucan 2 which was a two man powered aircraft.

He was also involved in the Sea Cat air ship.

And of course in the modelling world he promoted the Bournemouth Club Classic class rubber competition.

Just Google Martyn Pressnell to read more.



THE CENTURION

Get the latest addition to the VMC Free Flight Hangar

It's been a while since we released a good old fashioned rubber-powered free-flight model and we're sure that many of you are hankering to get back to the flying field with a traditional "stick and tissue" job.

Well here it is!





Like the KK Senator? You'll Love This!

Inspired by the Keil Kraft Senator, the rubber-powered, free-flight Centurion is a modern take on a timeless classic.

Designer Peter Sanders has taken all of the best bits of the Senator and tweaked them to create a traditional "stick & tissue" model that flies beautifully under rubber power and then glides superbly at the end of the power run.

The 31.2 inch (818mm) wingspan makes the kit an easy fit on your workbench or kitchen table and the detachable wing makes it a doddle to transport to the flying field.





Accurate Laser Cut Parts That Fit

What isn't retro is the fact that the model has been designed using the latest CAD software with laser cut parts giving accurate, tight-fitting joints and perfectly identical wing and tail ribs.

In addition, rather than you having to carve a nose from a single balsa block, the kit is supplied with a series of laser cut balsa laminations that simply glue together and sand down to form a much more accurate nose block.

Included in the Kit

As usual with our full kits, everything you need for the model is in the box, including copious FAI tan flight rubber, red and yellow coloured domestic tissue, all stripwood and acetate for the cabin. We've even thrown in a bottle of our Easy Sand wood glue!

Accurate plotted plan and parts layout guide: Laser cut balsa wood parts; Balsa stripwood; Hardwood dowel; Aluminium tube motor peg; Piano wire; 9.5" plastic propeller; Nose button; FAI tan flight rubber; 1.5" Plastic streamline wheel; Acetate for cabin screens; Tissue (red and yellow) Easy Sand wood glue.

The Vintage Model Co. 31" Centurion Rubber-powered Free-Flight Aircraft Kit - £34.99

Shed Times 4 - Nick Peppiatt

Continuing the build of the Earl Stahl Cessna 195

Wheels

On the subject of wheels, Earl Stahl's instructions state: - 'Wheels are balsa and they may be purchased or turned from laminated balsa discs. In either case, they should have bearings cemented to the sides so they will revolve freely and accurately.' Not knowing where to purchase suitable balsa wheels, or any other reasonably lightweight ones, here's how I made mine.



Fig 1. One wheel assembly and the laminated parts of the other.

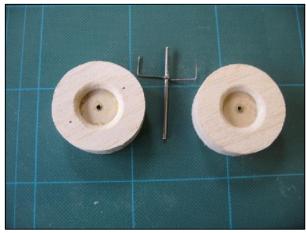


Fig 2. Wheels sawn round and drive device



Fig 3. Spinning the wheels. The wheel is turned round, both sides can be sanded.

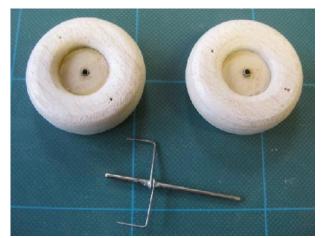


Fig 4. Pair of formed wheels

The laminations for the 45mm diameter wheels were cut from 2.5mm thick balsa (Fig 1). The central core is a piece of 0.5mm plywood with balsa on either side, and the outer pieces are two cross-grained layers of balsa, glued with aliphatic resin adhesive. The cores of the wheel side pieces were sawn out, with my Aeropiccola Vibro-Saw, and sanded to fit over two smaller 19mm dia, 1mm thick ply discs, which were then glued on either side of the core and the central hole drilled out to take a brass bearing tube of 2.5mm od and 2mm id. I have some brass tube for 18swg wire, which fits nicely into 2mm id tubing. Some lengths of this were soldered to the ends of the under-carriage legs, after cross-holes were drilled at the ends to take some retaining wire (15 amp fuse wire – see Fig 5). The wheel assemblies were then sawn to the outer diameter (Fig 2). I made a driver from 14swg wire with prongs from 1/32" wire soldered to it. The driver was fitted into the chuck of my ancient Black and Decker drill, which can be fitted to a stand, and spun so that the tyre form could be sanded with a sanding block (Fig 3).

The formed wheels are shown in Fig 4. The prong holes were filled with light-weight filler. After applying several coats of sanding sealer, painting and fitting to the axle a disc of plasticard will be attached to form the hub cover. The weight of the sanding sealed wheels is 4.6g each. The tail-wheel is a commercial plastic one of 20mm diameter.

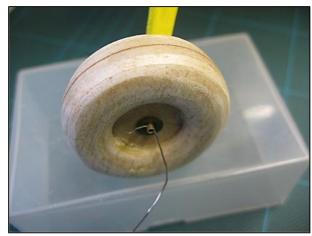


Fig 5. Wheel retention; the retaining wire has not yet been twisted over and cut to length, as the wheel has not been painted



Fig 6. Paper windscreen pattern. The pieces of tape are at the rear.

Spray painting

The covered airframe was airbrushed with Tamiya X-8 gloss lemon yellow, in a similar manner to (and in the same colour as) the Nesmith Cougar Peanut described in the January 2017 edition of NC. The inside and rear of the cowl were sprayed matt black (XF-1), and the motor mount flat aluminium (XF-16). Part of the cabin framing was brush painted grey (XF-53).

Fitting electronics

Before attaching the cabin glazing, I installed the electronic components and the motor.

Cabin glazing

This model has a former in the position of the pilot's head, which makes a three dimensional pilot difficult, so I fitted a profile pilot of sorts, cut from a photograph, to this former.

The cabin was glazed with 0.13mm thick acetate sheet.

A paper template was developed for the windscreen by a trial and error process of fitting it to the airframe.

The clear sheet was then cut to this pattern and attached to the top rear of the supporting frame with pieces of low-tack masking tape.

The windscreen was lifted and R/C Modellers Craft Glue (RCMCG) applied to the interior parts of the frame where the plastic would contact. Further narrow pieces of masking tape were applied to hold the windscreen in position. This was then attached to the airframe with thin dope carefully applied around the edges with a small brush. This was allowed to dry and the pieces of masking tape removed. Further dope was then applied in the masked off areas. This process is somewhat easier said than done.

I had to refit tape pieces and apply dope several times to get complete attachment of the windscreen. I did not use RCMCG to attach the whole screen because if it is under tension, such as from holding a curved piece of plastic, it can separate in time (cohesive failure of the adhesive).

Earl Stahl suggests that the window frames are cut from tissue. I made the side windows and frames in the following manner. The window outlines and border were traced from the plan on a piece of tracing paper.

A half sheet of A4 copier paper $(80g/m^2)$ was doped both sides, taped to a suitable surface. One side was then sprayed yellow and the other grey.

Double sided tape sufficient cover the area of the side windows was attached to the grey side. A copy of the window outline was taped over the yellow side of the doped paper and the window apertures cut out with a scalpel (Fig 7).

The reverse, inside, is shown in Fig 8.

The protective strips of the double sided tape were removed and the clear plastic sheet positioned and attached (Fig 9).

At the front edge I allowed an overhang of the double sided tape to attach to the windscreen. The outside line of the window and framing were then cut out and the window attached to the fuselage frame with RCMCG.

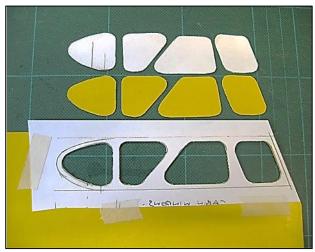


Fig 7. Starboard window frame, with cut-out pieces.

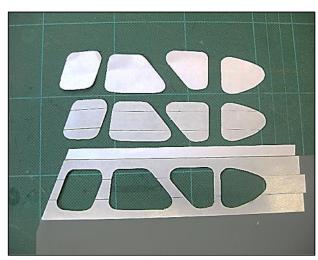


Fig 8. Inside of starboard window frame.

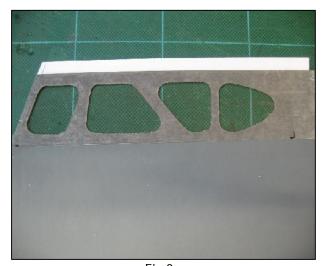


Fig 9.
Clear sheet attached to starboard window frame



Fig 10. Side window attached to fuselage

The cabin framing around the windscreen was cut from the yellow/grey paper backed with double-sided tape. I will include a photograph of the implement I used next time. The lower windscreen frame was cut to follow its shape.

The major step that remains before final assembly of the model is the application of the blue stripes and lettering.

Roy Vaughn

More Fun with the Playboy Senior

Readers of the Clarion may recall that I built a free flight Playboy Senior as a testbed for my homebuilt Atom Minor Mk3 sparkie. Since then there have been a couple of developments. The first is that the model now displays its name in vinyl on the wing, courtesy of Chris Redrup's wife's Cricut machine. No Playboy logo of course. The other modification, of more practical significance, is the addition of, gasp, radio control!



The model was set up from new as a free flight model with motor shutoff and DT operated by a setup I put together with one of Phil Green's single channel adaptors and Orange/Lemon TX/RX.

After the first flight in a breeze and a DT quite far downwind it seemed prudent to add rudder control so that it could be kept within the boundary of the field. Another benefit was to actually see (and admire!) the model in flight for longer than is usually the case with FF in our winds.

It turned out yet again that Phil Green had an off-the-shelf solution with his Digimatic 1+1 emulator.

This gave single channel rudder and three position throttle function on a push button. The push button function directly replaced the system I had been using with no mechanical changes. A bit of surgery at the back end provided a moveable rudder driven by a miniature servo embedded in the fin.

I took it to Salisbury Plain but left it in the car until, late in the day, discussion with John Hook helped me to take the plunge and get it in the air.

John kindly agreed to hold the transmitter during the launch.

The motor started easily and the model climbed away into the breeze. John held it into wind and it climbed steadily without getting too far ahead.

I had planned to take over from him on the TX but the flight was going so well I decided to leave it to John. The motor stopped on command and John expertly brought the model round and into wind for the approach.

This is where things went a bit wrong because the model appeared not to DT. It turned out that it had, but the tail had failed to tip up immediately because of friction in the DT line.

It eventually moved a few degrees at the wrong time causing a stall into the ground.

The model arrived with a bit of a thump but damage was minimal, a broken wing joiner dowel and a bent motor mount which absorbed the impact and prevented damage to the rather spindly motor mounting lugs.

Even the prop was intact.



Aside from this problem, which will be easily rectified, the flight was a great success. John was pleased as punch and we both went home with big smiles!

April 1946



Cover Story

We note with pleasure the gradual return to peace-time pursuits of well-known figures in the aeromodelling world on their release from the services and war-time activities. Our cover picture, which was taken by your Editor at Fairey's Aerodrome, on the occasion of one of the major pre-war

competitions, shows a group of model celebrities who have recently returned to the movement. The tense moment depicted in the photograph shows E. Chasteneuf putting the last turns on his Wakefield model, with Eddie Cosh, the late secretary of the S.M.A.E., looking on, watch in hand, whilst the figure on the left is that of the well-known French enthusiast, Father Amiard, of Flers, Normandy.

E. Chasteneuf has just rejoined the model aircraft trade; Eddie Cosh has joined the staff of the Aeromodeller, and Father Amiard, who has survived the German occupation, has just sent the S.M.A.E. an invitation to Flers to renew the pleasant pre-war associations which existed between the S.M.A.E. and French aeromodellers.

Auto-Ignition Engines

While the term
"Compression-Ignition
Engine" is a perfectly
correct method of
referring to the new

engines, devoid of ignition equipment, which have been developed on the continent during the war period, it is long and does not come easily to the tongue.

The use of the term "Diesel" in connection with these engines is not strictly correct as they do not use the fuel injection cycle which is the basis of the engines devised by the late Dr. Diesel, although spontaneous or automatic ignition takes place, of course, immediately injection of the fuel is effected.

If one considers the actual sequence of operation of these new engines and their method of producing combustion of the charge one is led to the conclusion that they are in fact Automatic-Ignition Engines and this, it is suggested, exactly describes them and is a better nomenclature than either of those which have been used up to the present. We propose to refer to them by the abbreviation "Auto-Ignition Engine" in the pages of Model Aircraft in future, as we are of the opinion that, all things considered, it is a better term to use when referring to this type of motor.

The L.M.A.E. Dinner ond Prizegiving

The most successful dinner so far held by the S.M.A.E. took place on Saturday, February 16th, at the Lysbeth

Hall, Soho Square, on the occasion of their annual prizegiving. Over 200 attended to hear some witty speeches by the speakers, including one from Sir Fredererick Handley Page, who was the principal guest.

The dinner is fully reported elsewhere, but we would like to comment on the number of old enthusiasts present, some of whom had not attended an S.M.A.E. function since the outbreak of war, indicating that supporters of the Society who have been involved in the Services or essential war work are now finding their way back to a normal life in which the S.M.A.E. takes a place.

Another pleasing feature of the dinner was the large number of provincial club members who attended, showing that those outside the London Area are taking a more active interest in the parent body and the movement in general.

The Wakefield Cup A passage in the speech made by Mr. F. J. Camm at the S.M.A.E. dinner, in his

reply on behalf of the Press, recalled that the well-known pioneer of model aircraft, Mr. E. W. Twining, was the first winner of a Wakefield Cup.

While this is quite true, it must be made clear that he was referring to the original Silver-Gilt Cup donated to the old K. & M.A.A. by Sir Charles Wakefield, and not to the present International Wakefield Cup, which was donated to the S.M.A.E. at a much later date by Lord Wakefield, the first winner of which was H. Newall, on behalf of Great Britain.

The original Wakefield cup was withdrawn from competition on the absorption of the K. & M.A.A. by the S.M.A.E., and it has not been competed for since it was won by Leonard Slatter, now Air-Marshal Sir L. H. Slatter, K.B.E., C.B., D.S.C., D.F.C., just before the 1914-1918 war.

We hope this will dispel any confusion which may have been engendered in the minds of those who did not realise that two separate Wakefield Cups have been in existence.

Incidentally, whilst we are indulging in reminiscences, it is interesting to recall that E. W. Twining made a habit of being the first

Abril 1946 MODEL AIRCRAFT

winner of important trophies and that he was also the first winner of the popular Gamage Cup with the first of the high performance "A" frame models. This win was largely responsible for setting a fashion for this type of machine, which persisted for some years.

"The Model Engineer" Exhibition

The competitions for model aircraft which will be held in connection with the Model Engineer Exhibition

have now been announced and are as follow:—

Section " A" (Seniors)

Class 18.—Wakefield Type Models.

Class 19.—Flying Scale Models.

Class 20.—Power Driven Models (excluding Rubber driven).

Class 21.—Sailplanes.

Class 22.—Solid Type Models (to any scale).

Class 23.—Original Flying Exhibits. Class 24.—Rubber Driven Models (open).

Section "B" (Juniors) (16 years and under) Class 25.—Wakefield Type Models.

Class 26.—Flying Scale Models.

Class 27.—Power Driven Models (excluding Rubber driven).

Class 28.—Sailplanes.

Class 29.—Solid Type Models (to any scale).

Class 30.—Original Flying Exhibits.

Class 31.—Rubber Driven Models (open).

Attractive prizes will be awarded in each class, and in addition a Championship Prize for the best overall exhibit irrespective of the classes in both the Senior and Junior sections.

Send for your entry forms and start on your models right away. Don't leave things to the last moment.

Houses or Hircraft

Stepping from our models, at one end of the scale, to the projected super air liner

"The Brabazon," at the other end, we feel sure that all model aircraft enthusiasts will view with regret the proposal to abandon its construction as a result of the difficulties which have arisen regarding the building of a runway at Bristol of sufficient length to ensure its take-off without the demolishing of some 30

It seems shortsighted, even in these days of acute housing shortage, that a project of such national importance as the "Brabazon" should be sacrificed for the sake of a few houses which could be rebuilt elsewhere at much less cost than that already expended on experimental work in connection with this aircraft.

It is to be hoped that the broad view will prevail, and that this country will not be robbed of the good work which has been carried out on this machine already, and of the prestige which would follow its completion.

New L.M.A.E. Officials

As a result of the resignation of the S.M.A.E. officials belonging to the Northern

Heights Club, will everyone please note that the Secretary of the S.M.A.E. is now Mr. L. M. Walker, of 16, Conifers Close, Kingston Road, Teddington, Middx., and the technical Secretary is Mr. G. W. W. Harris, of Lancaster House, 11, Windsor Road, Farnborough, Hants.

Airfields as Hying Grounds

Following an approach made to the Ministry of Aviation by S.M.A.E., there is a

good prospect of obtaining the use of an Air Ministry aerodrome for the Society's major events this year. A number of possible aerodromes have been offered by the Ministry, and it is possible that some of these might be available for Area Rallies or Club Rallies. A list of the aerodromes concerned is given below, and if any club wishes to obtain the use of one of these will they get into touch with the Secretary of the S.M.A.E. immediately, so that the necessary steps can be taken with the Ministry.

Location R.A.F. Aerodrome 10 miles E. Lincoln. Bardney 5 miles S.W. Colchester. Birch 29 miles N. Newcastle. Boulmer ••• 21 miles S.E. Berwick. Brunton ... Castle Camps ... 14 miles S.E. Cambridge. Chedworth 12 miles E.S.E. Gloucester. ... Cosford 8 miles W.N.W. Wolverhampton. Davidstow Moor

24 miles N.W. Plymouth. Eye 19 miles N. Ipswich. **Fowlmere** 8 miles S. Cambridge. Knettishall 24 miles N.N.W. Ipswich. ••• 6 miles S.W. Ipswich. Raydon 13 miles S.W. Cambridge. Steeple Morden 5½ miles N.N.E. Hunting-Warboys don.

Windrush 20 miles E.S.E. Gloucester. Winfield 3½ miles W.S.W. Berwick. Woodhall Spa 15 miles E.S.E. Lincoln. Ipswich

When applying to the S.M.A.E. for use of any of these airfields a list of the dates on which they will want to be used is essential.



Showing the hostile terrain & Messrs Cox & Vaughn in preparation mode.

From a fairly dismal start to the day, we enjoyed progressively improving weather, culminating in a three way fly-off from the A Team, with Roy having a magnificent flight with his rocket powered Creep to top out the list.

The day was not without its incidents! John H (flying an ex JT Dixielander) saw it come down somewhere in thick gorse, resulting in many fruitless searches by various helpers until Roy managed to spot it in sufficient time for John to get his 3 maxes in.. Ray forgot his 3 cell batteries, so contented himself by trimming activities & Don had a relaxed time flying his Coupe & a CLG.

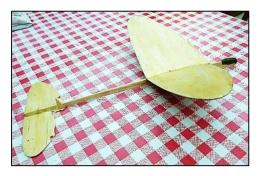
Dave E dropped his 3rd Caprice flight to miss out on another fly-off.

David C - totally consistent & cheerful as always.

9 attended - an enjoyable day.

I took one picture before the camera battery ran out.

	Combined	l Power Team (Keil	/Plugge)	
Roy Vaughn (Team A)	69977	Crookham	7.30	Fly-off: 5.02
Davide Cox (Team A)	73114	Crookham	7.30	Fly-off: 2.18
John Hook (Team A)	427	Crookham	7.30	Fly-off: 3.44
	Vintage	Rubber/Power (Pl	ugge)	
Dave Cox	73114	Crookham	7.30	Fly-Off: 3.24
	(Combined Glider:		
Dave Etherton	59852	Crookham	5.55	
	No	entries in other com	ps	



One bit of luck, I didn't mention was that John H found the CLG I lost when flying from exactly the same spot some three weeks previously - this after I spent a couple of fruitless hours looking for it!

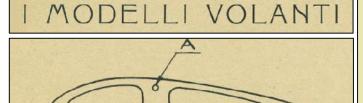
This pic taken this morning, with a nicely charged camera battery, after drying out on the kitchen table - looks bit forlorn with tattered tail feathers! Model is a 1.5 times Lunchbox.

Roy Tiller

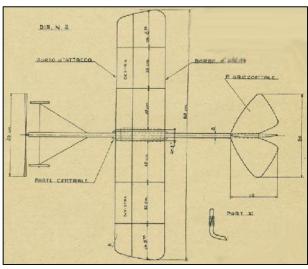
Report No. 125 Our earliest magazines continued.

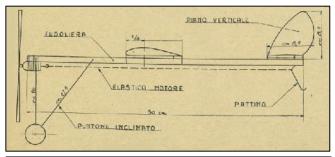
Continuing with a look at the earliest magazines held in the library in date order, we come to an Italian magazine thanks to Eraldo Padovano who scanned, tidied and supplied them on DVD.

1931 L'Aquilone. We have a full run of this magazine from January to December 1931. A rough translation of the stated purpose of the magazine declares that it is "Aeronautical Propaganda Journal by the Government of Italy" The content is mainly concerned with full size aircraft and this is reflected in the cover designs, the cover shown here is the nearest that I found considered to anything that might be aeromodelling. The plans included this stick rubber powered model, fairly typical for its time but with an interesting wing construction utilising plywood ribs and bamboo outlines and spars. The bamboo being bent in hot water.











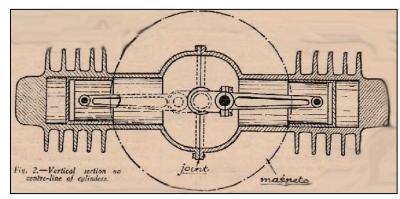
The advertisements included this offering: a

rather snazzy pair of goggles by a manufacturer in Torino, Turin to us. I have fond memories of dealing with the Fiat factory in Turin and supplying them with crankshafts made in Poole. On our first visit were refused entry to the site, perhaps we were a bit naive arriving in a Ford car to visit a Fiat buyer. Eventually we were allowed to hide the Ford in a corner of the car park and Fiat provided transport for the rest of the one week visit.



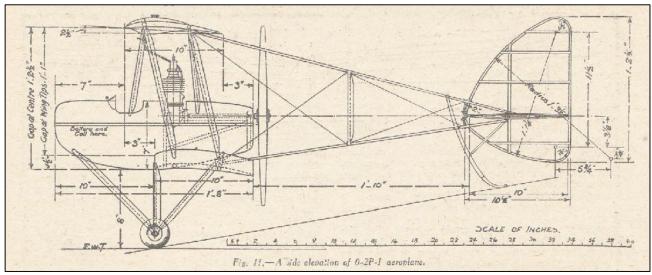
1932 Hobbies. It does what it says on the cover which means that the aeromodelling content is quite small but there is some. Our earliest issue of this weekly magazine is dated December 3rd 1932 and includes part 2 of a series on making a Model Petrol Engine designed by F. J. Camm, "a twin-cylinder, horizontally apposed, two-stroke petrol engine with a flywheel magneto, intended for model aeroplane purposes. This engine would develop, roughly, about $\frac{1}{4}$

h.p., so that it would be sufficiently powerful to drive a machine weighing about 4 or 5lb. Castings for every part of the engine are available for a nominal sum. My primary aim in preparing these designs has been to create interest in a form of power now quite practicable for model aeroplanes as a result of the perfection of the flywheel magneto."

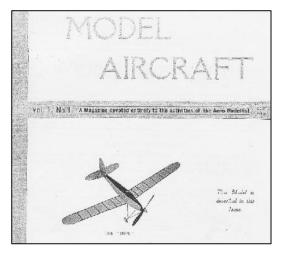


That looks like quite a project which can also be said for the first model aeroplane plan we have in Hobbies magazine. The issue dated Sept. 16th 1933 has E. W. Twining's "Aeroplanes for our 15c.c. engine-No. 5". This is a pusher biplane identified as "0-2P-1". This designation system seems to be similar to that used for steam locomotives i.e. a 2-4-0 indicating 2 wheels at the front, 4 driving wheels and no wheels at the back. Rail aficionados please excuse my lack of correct terminology. Perhaps 0-2P-1 was to indicate no foreplane, 2 mainplanes, pusher prop, and single tailplane. This issue has the side and front views of the model only and is to be continued next week presumably with details of the wings, so unfortunately I am unable to offer plans to all you eager builders with your 15cc engines sat there waiting for a suitable model.



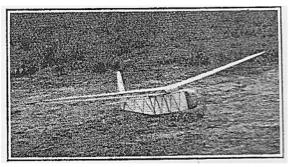


1932 Model Aircraft. This is not "Model Aircraft The Journal of the S.M.A.E.", that will not be available for another 14 years. The Model Aircraft magazine which appeared in 1932 was published by Model Aircraft Supplies Ltd. 53 Old Kent Road London S.E.1. The first issue Vol 1 No 1 was dated September 1932 and we have just a photocopy and no further issues. The Snipe, a 40" wingspan rubber powered model shown on the cover, is a design by C. J. Burchell who had plans published also in Model Engineer and English Mechanics. Plans at half and full size are included with the usual comprehensive build

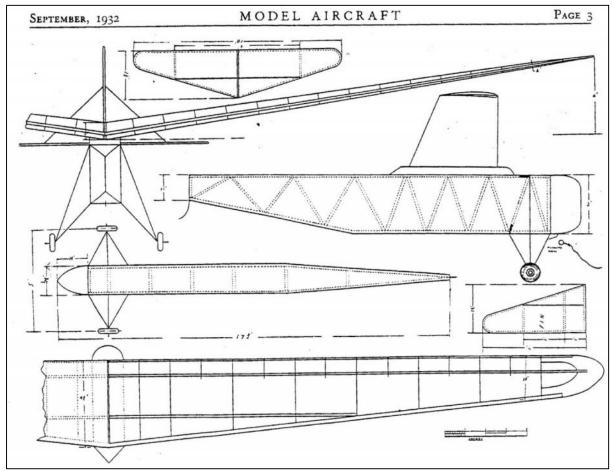


instructions and minimal trimming advice. A kit of materials (including "wood") complete with full size blueprint was offered at 15/6 carriage paid.

The Volplane, a balsa glider of 44" wingspan by L. Walker, is also shown as a reduced plan. The undercarriage facilitates towing up from the ground with the line attached to the releasing hook. "The more spectacular method is towing by a power model. Allow about 20 yards of thread and attach one end to the releasing hook, the other end is secured to the centre of the wing of the aeroplane.

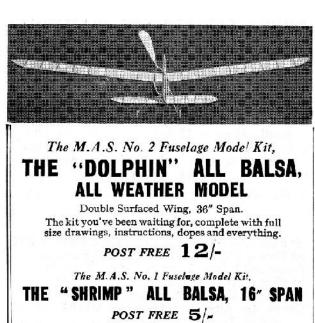


Both models must rise from the ground and the glider should release when the power of the aeroplane finishes and the flying speed slows down." A kit of materials (including "balsa wood") complete with full size blueprint was available at 9/6 carriage paid.



1932 Popular Flying. Our earliest issue is Vol 1 No. 5 August 1932. There is no aeromodelling content in any of our August to December 1932 issues other than the advertisements so here are a few examples.





Before you tackle No. 2, it is essential to build No. 1 as it is a complete introduction to Balsa Wood Construction, so we make

A SPECIAL OFFER of the 2 KITS for POST FREE 16/-

THE MODEL AIRCRAFT STORES, 133 Richmond Park Road, BOURNEMOUTH Write for Lists.





Should you not be able to wait for your goggles to be delivered from Italy here are a pair from a U.K. supplier

Plans for the Rigby Swallow paper/card model available by email.

Roy Tiller, tel 01202 511309, Email - <u>roy.tiller@ntlworld.com</u>



Secretary's Notes for July 2021

Roger Newman

Despite the delay in lifting lock-down rules, the revised date published by the Government does allow us to continue with our event at RAF Colerne on the planned date of 25^{th} July. Having spoken with Dave Hanks of the South Bristol Club, he is in full agreement, so all we now

To recap on the event, the Cagnarata classes are as follows - note that Tailless has been added, an oversight on my part to have not included it in the original notes.

want is a combination of a reasonable attendance & some fine weather.

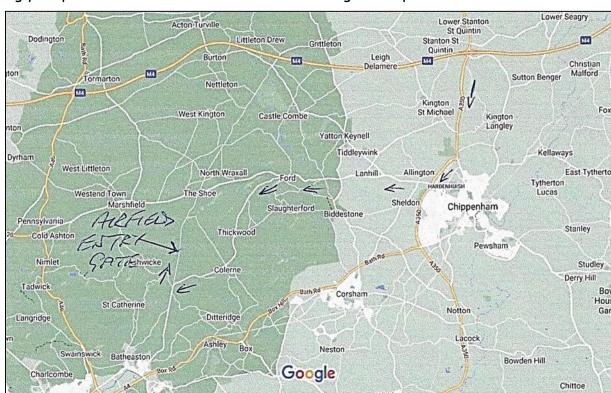
Class	K Factor	Max for class
E36	1	120 secs
Mini-vintage Power	1	120 secs
F1G / Vintage Coupe	1	120 secs
F1H / A1	1	120 secs
Mini Vintage Rubber	1	120 secs
Open Vintage/Classic Glider	1	120 secs
Tailless	1	120 secs
P30	4/3	90 secs
E30	4/3	90 secs
CO2	4/3	90 secs
Under 25 Vintage Rubber	3/2	80 secs
Hi-Start Glider	3/2	80 secs
CLG / HLG	2	60 secs

Note 1: 3 flights, no rounds

Note 2: Competitors may enter more than 1 class

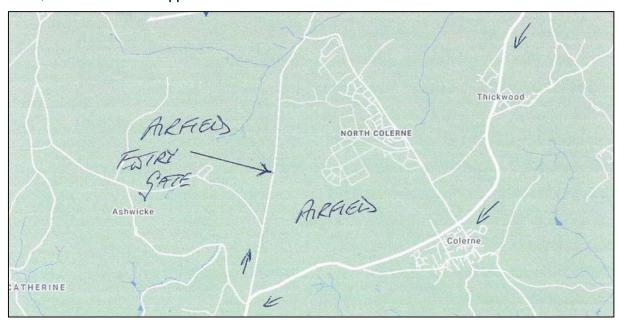
Note 3: DT fly-offs may be used as appropriate, with fly-off time factored as per max in class.

A map of the venue showing the entrance gate is below. The gate will be open at 10.00am & manned until 11.00am with a mobile number posted for those who arrive late to contact on arrival for entry. Basic toilet facilities will be provided but there is no "on site" catering, so bring your packed lunches etc! Entrance fee including all comp entries is £10.



Comps finish at 5.00pm, prize giving at about 5.30pm dependent on whether fly-offs are needed & off the field by 6.00pm.

As a reminder, look up RAF Colerne on Google maps - SN14 8HT - satellite view to see the airfield, south west of Chippenham off the M4 J17.



From the M4, come off at J17, heading south to Chippenham, round the bypass to the A420 & head west for approx. 1 mile to Ford, then fork south west in Ford to Colerne.

Don't forget the Tomboy Precision event as well & of course, all sports fliers welcome. The Tomboy comp is straightforward. Target time to ground will be set on the day, any form of propulsion may be used i.e. internal combustion, electric or CO2 with unlimited engine run but be warned - target time will probably be set quite low to keep flights in the field. All models to have some form of dt.

Liquid prizes for first three in both Cagnarata & Tomboy comps plus Tomboy Trophy for winner of latter.

Nostalgia

Martin Dilly is planning to produce a booklet on free flight for next year's BMFA (SAME) Centenary. He has asked that we contribute some words, pictures & plans etc on the emergence & rise of vintage free flight - broadly since the late 1970's. If any of you have memories and/or photos - in particular of the very early days at Biggleswade Common & of the meetings at Middle Wallop in the early'90s, can you kindly send them to me (rogerknewman@yahoo.com) -

all contributions will be gratefully acknowledged & will be incorporated into a chapter for his booklet. We did have some splendid modellers & fliers in those days, sadly many have passed away & it would be good to remember them. As some "for examples" - all those large marvellous "sparkies" like the multiple magnificent Valkyries taking to the air, John Leith & his McCoy powered Civy Boys & Civy Hearse, Peter Michel, Ramon Albon & Mike Kemp flying vintage Wakefields as they had probably never been flown before, Robin Kimber, Peter Michel & Peter Tomlinson flying large vintage gliders - all immaculately constructed & many other abiding memories.



The overseas contingents from the USA, Italy & the Czech Republic - one could go on & on. Sadly we shall never see those days again but wouldn't it be so nice to have one last blast whilst a few of us still remain!

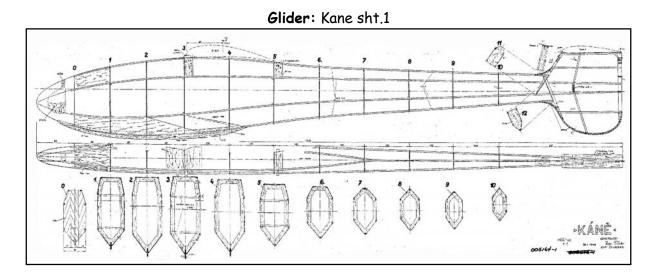
A touch of personal nostalgia. When recently sorting through the garage, I came across the fuselage of my (very) ancient Diamond Demon. The fuselage has to be over 50 years old, recovered some time ago & not very well - in nylon, with its original Mills .75 but sporting a newish wing & tail made about 10 years ago. It has borne a charmed life, being lost more than once - even spending two months in a tree near Beaulieu one summer. Hasn't been flown for some time, but I must dust it off & give it a few more outings before an inevitable demise.



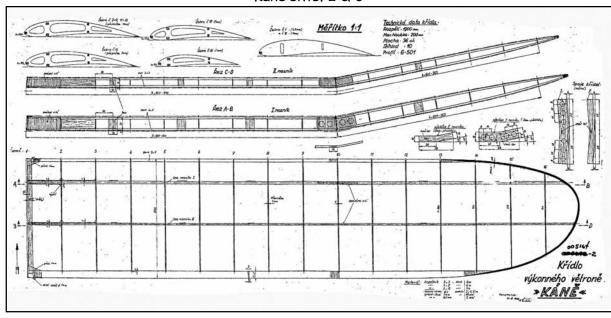
E20 happenings

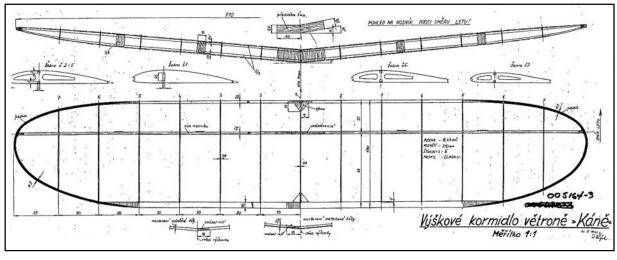
Sergio Mendes kindly gave permission for us to reproduce the article mentioned last month on the MicroStarduster & better still, sent us the pdf file for our Editor. My progress has been painfully slow this month due to other things taking precedence, but the appetite was wetted at the recent 4th Area at Beaulieu when Dave Etherton produced & flew his "Peterborough rules" version complete with carbon boom, which performed as if on rails - very nice.

Plans for the month Why not a few memories of past times:

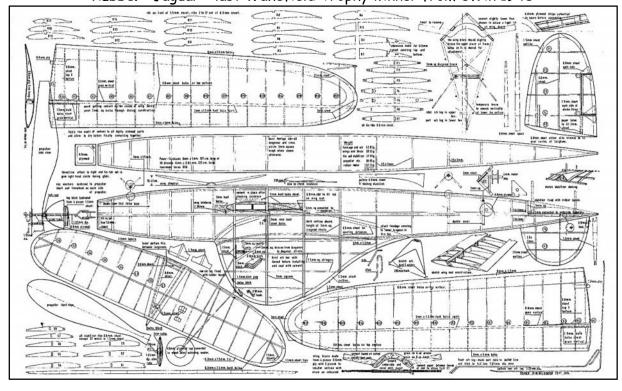


Kane shts. 2 & 3



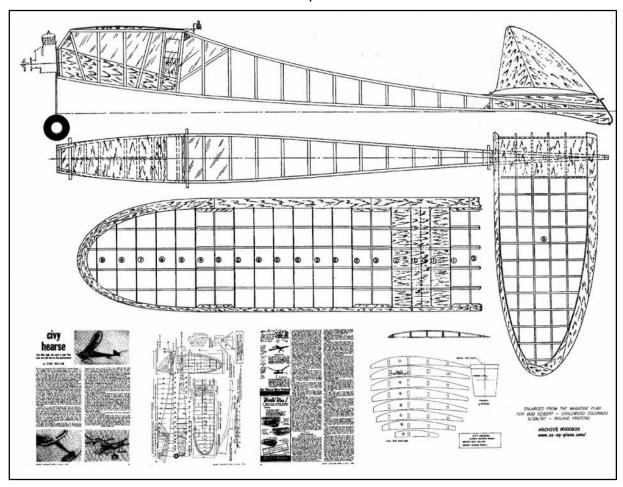


Rubber: Jaguar - last Wakefield Trophy winner from UK in 1948

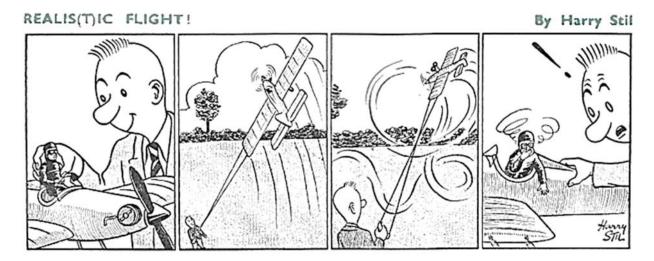




Power: Civy Hearse 61



Roger Newman



Editor: Can you spot the error?

EAST ANGLIAN GALA

31st Jul, 1st Aug 2021. 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.campsite@gmail.com

Saturday 31 July	Sunday 1 August
Combined Rubber	Combined Power
Vintage Rubber/Power	Combined Electric
Classic Glider	Combined Glider
Tailless	Mini Vintage
E36	Classic Rubber/Power
P30	CO2
HLG-CLG.	Vintage Glider
	Bowden

The SAM35 4oz/8oz Vintage Wakefield event will be run on Sunday

BMFA rules apply for above events .

Start time each day 9.00 am, finish 6.00 pm.

Competition entry £5.00 for any event taking place on the field.

The Bowden competition will be organised by Brian Waterland and the Peterborough Model Flying Club, registration before 10.30 am on Sunday. The event will be run generally to BMFA rules, including the cabin/cockpit requirements, the ROG, the permitted engine starting time of two minutes and the target flight time of 45 seconds but excluding the subjective aspect of the model build quality and flight profile.

There will be a fly off in the event of a tie.

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. There will be toilets.

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 register and pay the £5.00 site fee at control.

For further information on this event contact:

Michael Marshall: Tel;01223 246142 or email; mandrshall@gmail.com

Radio DT Systems

Hi All

A few of you may be aware that I am involved with Leo Bodnar Electronics.

Come July 2021 it is intended that this will no longer be the case.

From that date or before, some of the products sold by LBE, such as the RDT system starter kit may not be available as they are at the present. This is a heads up message to that effect.

Thanks Peter Brown

Classic A1 Email International Important Update

Anyone interested in entering the Classic A1 Glider 'postal' contest organised by Stuart Darmon please note that you now have until December 31st. 2021 to complete your entries. The original six-month time window, which was to have closed on July 1st, has been extended due to public health restrictions remaining in much of Europe, and to the recent severe flooding in parts of Australia. All other details of the event remain unchanged, and entries already made will not be affected.

Details from: stuartdarmonf1a@yahoo.com

Classic A1 Glider Email International 2021

Eligible Models

A Classic A1 glider is any Free Flight towline glider of total projected surface area not exceeding 18 square decimetres, built in accordance with a design published or kitted between January 1951 and January 1961, as per BMFA Classic Glider rules (https://britishmfa.sharepoint.com/sites/public/Rule Books)

Maximum length of towline 50 metres under 2Kg. tensile load

The Contest

All flights for each entry must be made on the same day between 01 January 2021 and 01 July 2021 inclusive. All flights must comply with local regulations governing model flying and with the guidelines of the national aeromodelling governing body (BMFA, AMA, etc.)

All flights for each entry must be made with the same model. An individual may make up to three separate entries provided that each is made with an entirely different eligible model.

A model may not be used by more than one individual over the age of 16 years. Juniors below this age may fly a model borrowed from another entrant.

The maximum for the first flight of each entry is 30 seconds. If this is achieved, the entrant is permitted a second flight of maximum 60 seconds, and so on, the maximum increasing in increments of 30 seconds until either a max is not achieved ,or flying cannot continue (e.g. because the model is lost or damaged). The score for that entry is the total flight time including the sub- max final flight.

All flights must be timed by a person other than the entrant. Procedure for starts, timing, attempts etc. is per F1H except that a flight aborted by RDT does not qualify for a second attempt, even if less than 20 seconds (in line with BMFA classic rules)

Entry

Entry is free of charge. Once the flights are completed, entry is submitted no later than 07 July 2021 by email to classica1postal@qmail.com by sending the following information:

The name & contact email* of the entrant

The name(s) of the timekeeper(s)

The sore, in seconds, in the form of an addition, e.g.

30+60+90+120+124=424

The name of the model and where it was published

The country and location where the flights were made

If entrants aged 16 or under wish to be eligible for the junior prize they must include their age in years (D.O.B. not required). Juniors are also included in the overall results and are eligible for the other prizes.

In order to qualify for the team prize the entries of all three team members must be submitted in the same email, also stating the name of the team. Entries received in this way will also be included in the individual results.

Information about the flying, the site, etc. plus photographs will be very welcome and will help in reporting the contest in the modelling press.

INTERNATIONAL POSTAL COMPETION

July 1st 2021 to February 28th 2022

The event will be held from July 1st to February 28th inclusive. A good friend well versed in global climatology did some extensive research on options presenting balanced timing of weather conditions for both hemispheres and this period appears to be potentially promising.

E vents:-

P30. Models conforming to AMA rules . ie. 40g minimum airfame weight, lOg maximum motor weight, no dimension exceeding 30 inches, unchanged commercially available plastic propellor 23 - 25cm in diameter. No gearbox.

Senator. Replicas of the KeilKraft 'Senator'

Common to both classes: - Three flights to 120 seconds maximum; flyoffs 150 seconds max until target is not achieved.

Classic 1/2A. Participation limited to 'locked down' models with no moving surfaces other than for d/t operation and powered with cross-flow engines; schnuerle ported units are not eligible.

Three flights to 120 seconds maximum; flyoffs 150 seconds max until target is not achieved. Engine run 7 seconds for first three flights, 5 seconds for flyoff flights thereafter.

In all instances multiple models may be separately entered during the contest period. It is not necessary to complete entry flights in a single day. Please forward details of a completed entry as soon as possible, at latest by email or post by March 14th 2022, together with any anecdotes or photos which I will endeavour to include in a closing report.

Requirements are: Entrant name. Country. Email address. Class. Model name, if from kit or plan. Full score(s)

Thank you for your participation and support. Good flying!

Jim Moseley <u>i i moseley @.look.ca</u>

50 Exeter Road, Apt. 1153, Ajax, Ontario, L1S2K1, Canada

La Grande Coupe de Birmingham 2021

Preliminary Notification -

This year's event will take place at its traditional home of MOD North Luffenham on the 6th or 7th of November 2021.

Do please note that this is a month earlier than the traditional date for this meeting. The reason for this change is to try and pre-empt any restriction of travel which may be brought about by a winter surge in Covid19 infection rates. We all hope that the vaccination programme now underway will mean a return to "normality" by Autumn, but many experts still caution that the Winter will see a rise in Covid19 infections as happens with all respiratory viruses.

So that's why we're moving it, now some changes, hopefully improvements, that we will be making to the event:

Many Coupe fliers will be aware of the on-line 1960s Coupe postal run by Mark Braunlich and for several years we have included these coupes as a separate classification within the F1G event. We believe that these models have great potential as a reduced technology alternative to F1G and to raise their profile we intend to introduce a new three flight event "pre-1970 Coupe d'Hiver". To encourage participation in this new event we will award prizes for the top three places with a trophy for the winner.

Within this event there will continue be a classification for Vintage Coupes which meet our existing "pre-58" cut-off date and fliers should declare such models as "Vintage" to control when entering. The top 1st ,2nd and 3nd placed models meeting the pre 1958 date will all be awarded prizes, with the first placed receiving the Vintage Plate Trophy.

A flier may use up to 2 models in the pre-1970 class; to be eligible for the Vintage Coupe awards all models flown must meet the pre-'58 cut-off.

As ever the F1G event for the Aeromodeller Trophy will be flown in five rounds to a published timetable and with an unrestricted fly-off. Any model which meets the current F1G rules is eligible to fly in this event and up to 3 models may be flown.

As soon as we have some certainty of how the year will unfold we will confirm details of venue and timing. This early announcement is to make fliers aware of the change in date and prompt those who's lockdown building may have stalled to start that pre-1970 coupe that they've always fancied.

Stu Darmon

Revised

Southern Coupe League 2021

Date	Competition	Location
30 May	London Gala	Salisbury Plain
11 July	Fifth Area	Area Venues
25 July	SAM 1066 Cagnarata	RAF Colerne
15 August	Southern Gala	Salisbury Plain
5 September	Nationals	Salisbury Plain
9 September (midweek) (tbc)	Dreaming Spires	Port Meadow
18 or 19 September* (tbc)	Crookham Gala	Salisbury Plain
9 October	Coupe Europa	Salisbury Plain

*--Weather dependent

Peterborough Flying Aces Nationals 2021

SUNDAY 12th September

at Ferry Meadows, Nene Park, Peterborough PE2 5UU.

Competitions 10.00 to 16.15

A NEW EVENT FOR 2021!

Keil Kraft "Sedan" / "Rapier" / "Sportster", Nostalgia Rubber Duration Competition . A rubber duration event for these great old KK designs:

Cash Prizes to 3rd Place! Model to be built to plan but plastic prop up to 6" dia. permitted

Plans available from Brian Lever blever@btinternet.com or 01733 252416

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 Rubber /CO2 / Electric Incorporating KIT Scale:- Judged for flight profile and realism. Any C02 motor/tank permitted. See note re verification. Up to 36" Span. 'Judged' for flight profile and realism. See note re verification

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

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

VMC "PILOT" & KK "ROBIN" Rubber Duration: -. Senior and Junior Classes.

Models must use plastic prop and kit prop. size Note! We would like to see that any junior has had a hand somewhere in the building of the model.

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", tip to tip, span launched by the supplied "Hi Start" bungee.

Best Unorthodox:- Unusual models. Flight must be seen by the nominated Scale Judge 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).

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 12/09/21) Prize 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.

PLEASE NOTE! NO GROUND PENETRATING STOOGES PERMITTED

Revel in the special atmosphere created at this unique event. Toilets, Café, and Park Visitors Centre.

Contact Brian Waterland on 01778 343722 (07717 461000 on the day).

See also Peterborough MFC Website at www.peterboroughmfc.org

Note! Govt. and BMFA Covid restrictions applying at the time will be enforced.

Cocklebarrow Vintage R/C

5th September 2021

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 only no competitions.

BMFA insurance essential

Contact: Tony Tomlin
Tel: 02086413505, Mobile: 07767394578
Email: pit2.alt2@btinternet.com

AREA 8. SALISBURY PLAIN, 2021.

Area 8 has been booked for free flight use, every Saturday/Sunday, plus 3 Bank Holiday Mondays in 2021, subject to final approval on the Friday morning preceding each weekend.

Those wishing to sport fly/trim must hold an annual season ticket. 2020 season tickets remain valid for 2021, with no new tickets being issued, or payment requested in this case. Those not having a 2020 season ticket may obtain one for 2021 via donna@bmfa.org for £20. The terms and conditions remain the same as in previous years, although users are also reminded that when driving they should stick to established tracks and avoid creating new ones.

On contest days only, non-permit holders can sport fly/trim on payment of a site access fee of £5.

All flyers entering a contest must also pay the site access fee. 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 the site access fee for BMFA Centralised events, and the World Cup events. You are reminded that the BMFA pay for an annual licence to use the site via the FFTC.

Driving on Salisbury Plain.

We have frequently been reminded by the authorities that allow our access to Area 8 of

The need to drive and behave safely, as it is a potentially dangerous place. Respect the environment, as it is a conservation area with numerous vulnerable species.

More recently all users of the Plain have been asked to avoid creating any new vehicle tracks.

The Salisbury Plain Military Lands Byelaws 1983, state that a driver may only leave the road (Public Right of Way), by 15 yards, and then only to park. For practical reasons, the interpretation of this can be somewhat liberal for our purposes.

Three farmers have grazing licences for Area 8, and an annual hay crop is taken from the plateau. Their rights and livelihoods must be respected.

This leads to the conclusion that vehicle movements should be kept to a minimum on grassy areas, and any motorised retrieval should be confined to the well-established tracks.

We never know who is watching our behaviour on any of our few remaining flying sites.

Peter Watson. FFTC Area 8 liaison.

E30 Batteries

I have bought some batteries direct from China which are suitable for E30. They are labelled 75mAh. I have so far only had time to test three and I can report that they are all good and in fact give a better performance than any I have previously tried. If you send me £10 I will put four in a Jiffy bag and send them to you.

Ron Marking, Pros Kairon, Pennance Road, Lanner, Redruth TR16 5TF

CARBON BOOMS For Hand Launched Gliders

If you need tapered carbon tubes for HLG booms I may have what you want. As supplied they are 99cm long, taper from 5.2mm to 2mm and weigh 6.4gm. As a rough test a 58cm length, suitable for a Yashinskiy type of model, weighs 3gm after a little application of wet-and-dry paper (used wet, of course) and it looks as if there's quite a bit more that can come off. The thin end that's left is good for a catapult glider.

Price is £7.00. In normal times I'd sell direct at contests, but postage and packing would be extra, depending on how many you need.

Contact Martin Dilly to order

Tel: 0208 7775533 or e-mail martindilly20@gmail.com.

Free Flight Supplies

Michael Woodhouse

mike@freeflightsupplies.co.uk & http://www.freeflightsupplies.co.uk

Free Flight Supplies is still operating. I have made arrangements to both receive and despatch materials. If you need stuff I can supply, it just might take a bit longer to get things to you. Carry on building!

Stay safe and look after yourselves.

We are only posting on an occasional basis. Any calls or e-mails asking "where's my order" will receive a curt load of invective from me or June.

If you get June the reply will leave you stunned!

ASUKA WASHI JAPANESE TISSUE

As most free flight modellers are aware ESAKI have ceased supplying Japanese tissue. ESAKI had been the place to go to for the supply of tissue. When couple of years ago ESAKI ceased their operation, the search was on for a replacement. After much to and froing of e-mails a new product has emerged in the guise of ASUKA WASHI. This new tissue is basically the same as ESAKI but in appearance a little denser and less shiny. In the autumn of 2019, I received samples which I passed around the various flyers and all the responses I received were favourable.

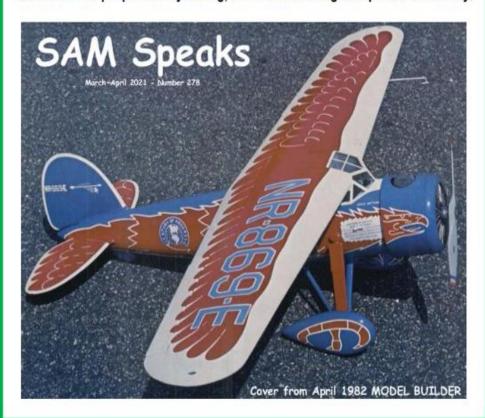
I now have a supply of ASUKA WASHI. The current range of colours is limited to red, yellow, blue, orange and white. The sheet sizes are the same as ESAKI at 450mm (18") x 600mm (24") the weight is 14 grams per sq. metre whereas ESAKI was 13 GSM. The range of colours will increase as production moves forward and demand dictates. Visually the colours muted compared to ESAKI but as noted denser. The price is £1.75 per sheet plus postage.

I still have stocks of ESAKI left particularly in the colours not produced by ASUKA as well as the chequer board colours.

SAM Speaks USA.

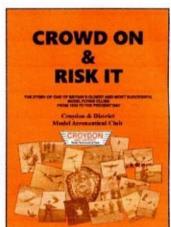
This bi monthly emagazine can be obtained from the Society of Antique Modellers. Web site http://www.antiquemodeler.org/ for the modest cost of \$30 pa.

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



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 (<u>martindilly20@gmail.com</u>), 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 seventh roll. Doing the sums, that means that there's now just over a mile of Dilly Jap covering models all over the world.

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

Anyhow, since the last roll came in 2015, the price is slightly higher (maybe as a ressult of you-know-what ...xit and its effect on sterling), but it's still only £13 for a five yard roll a yard wide, or £15 by mail to the UK. I normally sell it in rolls at contests, but lately many people have had it sent lightly folded, so I can do that if you prefer.

I'm on 0208-7775533 or e-mail: martindillv20@gmail.com

INDEPENDENT REVIEW OF DILLY JAPANESE TISSUE

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

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

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

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

FREE FLIGHT FORUM REPORT 2021

Indoor Duration - A Challenge to Conventional Design - Tony Hebb
Coupe in a Box - Gavin Manion
Building Other People's Mistakes - Stuart Darmon
The Models of Ray Monks - Simon Dixon
Simulated 3D Flight Dynamics - An Approach to Gain Insight for
Trimming and Aircraft Development - Peter Martin
Building During Lock-down - Phil Ball
Tame Your F1B and Related Thoughts - Mike Woodhouse
What Next for a Lady Flyer - Sue Johnson
F3 RES - RC for the Aging Free Flighter - Andy Sephton
From Wichita to Robin III - Mike Fantham
Further Thoughts on Carbon-Skinned Wings for F1A - Stuart Darmon
Geo Fencing and Electronic Stability - John Emmett

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

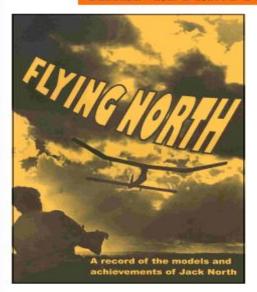
Copies are available from: Martin Dilly,

20, Links Road, West Wickham, Kent BR4 0QW

Or by phone: +44(0)2087775533 Or e-mail: martindilly20@gmail.com



THIRD RE-PRINT JUST ARRIVED



FLYING NORTH

A goldmine for vintage and nostalgia model flyers -

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

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

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

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

Price £20.00 in the UK, £24 airmail to Europe and £30 elsewhere. Contact Martin Dilly on +44 (0)208-7775533 or e-mail martindilly20@gmail.com

Free Flight Nationals 2021 substitute contests

The replacement contests for a cut down substitute Free Flight Nationals will not be the same as the "real" Nationals. We will apply a "light touch" organisation. The contests will be flown for their respective Free Flight Nationals trophies. The contests will be run to the standard gala format.

Free Flight Scale - Sculthorpe

The STC will run a casual free flight scale session with no specific contests at the East Anglian Gala.

Bowden Trophy - Sculthorpe

PMFC will run the Bowden at the East Anglian Gala.

SAM35 - Sculthorpe

The 4.0- and 8.0-ounce Wakefield to be run at the East Anglian Gala

Entry and Fees

There will be no pre-entry requirement. Entry on the day. The entry fee is covered by the contest licence or payable at £5.00 per day allowing the entrant to fly in as many events/classes as they desire.

Facilities

There will be no camping or other facilities except for the provision of toilets. The entrance gate at Sculthorpe will be manned.

Free Flight Open - Salisbury Plain - August 28/29th

Saturday Sunday Combined Glider SLOP Combined Rubber P30 Rubber Combined Power Hand Launch Glider Combined Electric Vintage Rubber/Power Mini Vintage Tailless Woman's Cup CO₂ Duration Catapult Glider Vintage Glider FROG Junior Classic Rubber/Power* E30 Electric Classic Glider S3A Parachute Duration BMFA 1/2A power S4A Boost Glider Duration S6A Streamer Duration S9A Helicopter Duration S1B Altitude S5C Scale Altitude S2P Precision Payload Altitude S8EP Rocket Glider

Free Flight FAI - Salisbury Plain - September 4th/5th

Saturday	Sunda
F1A	F1H
F1B	F1G
F1C	F1J
F1Q	E36

Number of flights to be decided on the day. There will be no rounds Start 09:00 finish 17:00

^{*}Classic/rubber power will include the Cranfield Classic Start 09:00 finish 18:00

Provisional Events Calendar 2021

With competitions for Vintage and/or Classic models

All competitions are provisional and Covid restrictions may apply, Check websites before attending

February 28 th —	Sunday	BMFA 1st Area Competitions
March 21 st	Sunday	BMFA 2 nd -Area Competitions
April 2 nd ————————————————————————————————————	Friday Saturday	Northern Gala, Barkston Croydon Wake Day & SAM1966 , Salisbury Plain
April 25 th	Sunday	BMFA 3 rd Area Competitions
May 29 th May 30 th	Saturday Sunday	Free Flight Nationals CANCELLED London Gala, Salisbury Plain London Gala, Salisbury Plain
June 20 th	Sunday	BMFA 4 th Area Competitions
July 11 th July 25 th July 31 st	Sunday Sunday Saturday	BMFA 5 th Area Competitions SAM1066 Cagnarata +, RAF Colerne East Anglian Gala, Sculthorpe
August 1 st August 15 th August 28 th August 29 th	Sunday Sunday Saturday Sunday	East Anglian Gala, Sculthorpe Southern Gala, Salisbury Plain FF Open Nationals, Salisbury Plain FF Open Nationals, Salisbury Plain
September 4 th September 5 th September 12 th	Saturday Sunday Sunday	FF FAI Nationals , Stonehenge Cup, Salisbury Plain FF FAI Nationals , Equinox Cup, Salisbury Plain BMFA 6 th Area Competitions
October 3 rd October 9 th October 17 th October 30 th	Sunday Saturday Sunday Saturday	BMFA 7 th Area Competitions Croydon Coupe Day & SAM1066 , Salisbury Plain BMFA 8th Area Competitions Midland Gala, North Luffenham

Please check before travelling to any of these events.

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

For up-to-date details of SAM 1066 events at Salisbury Plain check the Website - www.SAM1066.org

For up-to-date details of all BMFA Free Flight events check the websites www.bmfa.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 - <u>www.sam1066.org</u> Flitehook, John Hook - <u>www.flitehook.net</u>

Mike Woodhouse - <u>www.freeflightsupplies.co.uk</u>

BMFA - www.bmfa.org

BMFA Southern Area - <u>www.southern.bmfa.uk</u>

SAM 35 - <u>www.sam35.org</u>
National Free Flight Society (USA) - <u>www.freeflight.org</u>

Ray Alban - <u>www.vintagemodelairplane.com</u>

Belair Kits - <u>www.belairkits.com</u>
Wessex Aeromodellers - <u>www.wessexaml.co.uk</u>
US SAM website - <u>www.antiquemodeler.org</u>
Peterborough MFC - <u>www.peterboroughmfc.org</u>
Outerzone -free plans - <u>www.outerzone.co.uk</u>

Vintage Radio Control - www.norcim-rc.club

Model Flying New Zealand - www.modelflyingnz.org

Raynes Park MAC - www.raynesparkmac.c1.biz

Sweden, Patrik Gertsson - <u>www.modellvänner.se</u>
Magazine downloads - <u>www.rclibrary.co.uk</u>
Aerofred Plans - <u>www.aerofred.com</u>

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