


	<h1 style="color: red; text-align: center;">NEW Clarion</h1> <h2 style="color: red; text-align: center;">SAM 1066 Newsletter</h2>	<p style="text-align: center;">Issue nc052021</p>
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Editorial

Three cheers, we are up and running again and the BMFA outdoor contest calendar starts up again with the 3rd Area comps, assuming we have somewhere to fly. I doubt that I will be able to report on the Midland Area event, which I assume will be at Luffenham, as Rachel has her second covid jab booked for that day.

The next milestone will be the easing of gathering restrictions so that indoor meetings can also be re-started. That will mean that I will have to re-start building the Frog 'Redwing', the fuselage of which currently resides part built at the end of our dining table.

What have I got lined up for you all this issue.

First up is Timperley's Ralph Sparrow who answered my call for copy with a tale of his refurbished Bowden 'Hummingbird'. He also has a picture of the Liverpool MAC in 40's or 50's but has no knowledge of the modellers depicted.



I have dug up some more Pylonius then followed up with more of my own memories which turned out to be indoor oriented, hence the title.

The engine analysis is the AM 10 which, if memory serves, was a powerful and rugged little engine based around the AM15 crankcase etc.

John Taylor Chairman of the Bournemouth club, which has a dwindling FF element, has set about photographing all of his many sports models and, together with a description of each, they will feature for quite a few issues. His article, 'Models Galore' presents the first three of his stock.

I've slipped in another of Ray Malmstrom's little wonders in the shape of 'SWEETHEAP' a small control-liner for .8 to 1cc engines. I would fancy doubling its size and sticking something like a Merco35 up the sharp end. I do get these aberrations from time to time.

The historic Middle Wallop roundel launching platform features in an offering by Joe Northrop, I think I must have become involved in vintage just as it was retired from use. I think I can remember it leaning against the cottage wall, but I do not recall seeing it in use. Joe also has a nostalgic picture of a group night out, these groups could be found in all the local hostelrys each evening after a day out on the airfield at the championships in the good old days.

Another all sheet small field flyer is presented by one Robert Hauk, whom I assume is from the USA from his missing 'u' in spelling colour. Looks like a great little model, all from a single sheet of 1/32".

Wakefields again from Peter Watt in Ireland. He makes some really nicely built models and his colour scheme shows them off wonderfully. He even gets Spencer Willis to follow suit on his commission build.

Things are wrapped up this issue with our regulars, Nick Peppiatt who continues his report on his Cessna 195 build, Roy Tiller with his digging into our magazine archive, our Secretary's monthly report on goings on here and there and finally a squeezed in poetic Peter Hall.

Editor

Although not a member of 1066 (or 35) I have a look at the New Clarion when it comes out. You are doing a grand job to find things to print over the last year. Thanks.

I have seen the "old photos" so rather than just leave this one of the Liverpool MAC from the 40's or early 50's in my pc memory I thought it may fill a space in the Clarion. I don't know any of the people in the picture and only recognise the Copland (?) streamliner model. Someone may know more.



Liverpool M.A.C. - 40's or early 50's

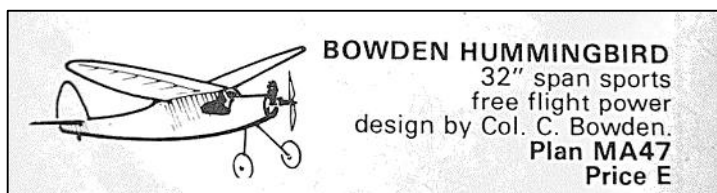
I got the picture from the son of W.Downey (pictured right in the Chipmunk of the Liverpool Flying Club).

The son was in the design office at AVRO Woodford and had given a model, made by his father in the 50's, to another modeller who passed it on to yet another modeller, who took the Mills .75 out and no doubt put it in a drawer where it probably still resides today, he passed the model onto me.



When I got the model I thought the wing and tailplane shape looked a bit Bowden'ish so did a bit of digging. I found a drawing in the 1985 Aeromodeller Plans Handbook that shows a similar looking model called the Bowden Hummingbird from the Model Aircraft magazine, plan number MA47. 32" span fits the model and the plan information. The fuselage is similar but not quite right. At some stage I showed it to John Wingate who published something about it in his column in the SAM 35 magazine (I think). He told me that Phil Smith contacted him saying that Bowden never designed a model that small but I think the evidence says otherwise.

At some stage John passed me the magazine article and reduced plan that was published in the Model Aircraft magazine but I cannot find it.





I thought that a new fuselage, as designed, would be nice to make. So, if anyone can scan the plan and article I would appreciate it. The model is very well made although the 1/32" fuselage sides have become a bit fragile after about 70 years. The wings and tailplane are still strong and true. The tissue covering on the open sections was torn and fragile so I stripped these and recovered with tissue over mylar. I put

an electric motor and radio control in the model and surprised the radio only guys who asked how will it fly without elevators? It flies nicely!

Hope you and Rachel have kept well.

Ralph Sparrow



Extract from Model Aircraft July 1952

Wakey! Wakey!

Here are a few notes for the special guidance of aero-modellers who intend to enter any of the Holiday Camp competitions being staged throughout the country this year :

Entrants who have undergone a long and fatiguing journey can, by special arrangement, avail themselves of the late 6.45 a.m. breakfast. In exceptional circumstances they may also be excused first parade.

Model Retrieving Rambles will be organised for the benefit of non-competing modellers. Special awards will be given to lucky model spotters. These, of course, will be in the nature of spot prizes.

It is hoped to provide a small quota of Beauty Queens for model photographic purposes. It is stressed, however, that Beauty Queens thus hired must be returned to the Entertainments Officer, in good condition, before leaving the camp.

Eliminators are to be organised for power models, we hear. Rather strange I always thought that self-elimination was their only strong point.

Problem now is the selection of a team for the World Control Line Championships. Obviously the answer is to organise a Knock-out competition.

A Painful 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 critical 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 long-sighted or near-sighted, 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.

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.

Pylonius

I've probably written about some of these memories before but you can have a second chance to read all about it, may come out different of course. If you find any discrepancies please advise so I can straighten out my recollections. None of us can be sure what we think happened was exactly the way we recall it.

My first brush with indoor flying was way back in about 1950 as a new member of 'The Rugby Model Engineering Society, Aeronautical Section'. A local scout group had an upstairs clubroom somewhere in Rugby town centre and it was acquired for an indoor session.

Memory is very hazy but I recall my mate Ian and I making Jetex50 RTP speed models as one of the magazines of the era had published an article on them. Just a hollowed out balsa block to take the Jetex50 with a 1/8th dowel boom and balsa wings and tails. I tried first, but I had put the tailplane on top of the fin for looks and this must have upset model. They had to be thrown quite hard to get going and we had made the mistake of setting up for an anti-clockwise circle which meant we had to throw left handed.

I launched mine too slowly and it dropped to the floor and slid round for a bit then, as the Jetex came up to full power, it flicked over and took off upside down for the rest of the charge. Lesson learned Ian really whanged his red model into flight and the model circulated at one hell of a lick and at the end of the flight there was just a circular red blur around the pole. When the fog subsided it was decreed that they were too dangerous and that was that for Jetex speed.

I recall that I had made a free flight model but have no recollection of its form or performance. I can only assume it did not fly. I remember our secretary Ken Sansom had also made a FF model, covered in green tissue (*why I recall the tissue I have no idea*). I do remember the model trying to fly but wings twisted in flight and model kept diving in. We had one success, a member, who may have been Jim Darke, had built an RTP model with microfilm wing and tail covering. This model flew beautifully recording quite long flights around the pole. It may have been a Copland 'Thistledown'.

Howard Boys was there flying one of his outdoor flying wings with Amco.87 power. The model did a couple of laps then the wing unplugged and the engine and the rest of the model peeled off to smack into the wall. Once again when exhaust fumes subsided it was also declared too dangerous.

I cannot recall much success and we never did it again.

I did not fly any indoor again until after I started work in the Aviation Division of Dunlop Ltd. in Coventry in 1967, where I went to start up the Electronics Drawing Office. I got a few interested in aeromodelling and we looked at indoor. There were several other small divisions making various odds and ends and for some unknown reason these were constantly playing musical factories, moving from one factory building to another which normally left an empty one for a few of us to try indoor in our lunch hour. I built a Laurie Bar EZB, condenser paper covered, materials being micro-x sold by Laurie. The buildings were not particularly high so times were not great, my best was 2-40 achieved by climbing up to the rafters, getting knocked down to recover at floor level and climbing up again. I also built a large model with a rolled tube fuselage and covered with microfilm, dope and castor oil floated in bath. Flew OK but must have been heavy as it took a loop of $\frac{1}{4}$ to power it. I had a short flirt with an ornithopter which took 4 strands of $\frac{1}{4}$ and it thrashed itself to bits in short order. Mick Blunt, the angling society secretary, made a helicopter. It was the usual built-up fuselage with built-up rotors top and bottom and after doubling to motor size it wobbled its way up to the ceiling framework and then walked along the ceiling for a couple of bays before descending.

Years later B'ham's Graham Walker flew a similar model in No2 hanger at Cardington and it climbed high alongside the six story block of flats in there, right up to roof level. Must have been a lot lighter than Mick's effort.

I think Dunlop eventually stopped shifting factories about and I got involved in a new merger between Dunlop Aviation and the Eldec corp. in the states and lunch hour flying ceased. My models were confined, the EZB to a cardboard box and a thin wooden suitcase for the microfilm job. These models then retired and were stored in the loft until my next foray into indoor.

My next brush with indoor was with Brian Roberts and the Coventry club who ran indoor meets in the Coventry Sports Centre, either Saturday or Sunday evenings, I don't recall which. It must have been somewhere around 1996/7, I had just re-met B'ham's Peter Martin at Wallop at a cancelled meeting and he told me of the Coventry events. I dug out my old models from the loft, the EZB was OK but when I looked into the suitcase for the microfilm model there was just a pile of sticks with no sign of the microfilm. I stuck the sticks back together and covered with pink & blue tissue. I also braced the wing with fishing line.

I flew at all their meetings and at the first one they were all flying 'Hangar Rats' so I had to have one for next meeting. I've built quite a few since including lightweights and Polystyrene. The lightweight, covered in Wilco Economy Food Bag plastic, regularly exceeded 3 minutes in its early days. Of course repairs eventually took their toll but I still have it stored somewhere in the garage with many of the others.



A line-up at a Walsall Bloxwich meeting in 2010

In my humble opinion the 'Rat' is the best introduction to indoor flying by far.

The Coventry meetings at the sports centre ceased but Brian Roberts somehow managed to get us a couple of hours in the Coventry Hippodrome theatre on Sunday lunch time when the cleaners were in.



Only time I've been centre stage anywhere. Graham Walker flew with us there and he did a really good job on stage with his 'Now is the winter of our discontent' excerpt from Shakespeare. I have a very amusing video of the occurrence.



The pictures are not very clear as they are taken from TV screen video stills.

Sadly these meetings were short lived as the Hippodrome was knocked down to make room for a park of some sort, but we had some good times. Observing flights from above in the circle being a novel change from looking upwards.

Around 2005 I started attending meetings at Alumwell College in Walsall run by Pete Ashmore and Colin Shepherd. A very large floor area and friendly roof trusses being a tight latticework that slow climbing models did not penetrate.

Alumwell was lost and Colin started up meetings in one or two different school sports halls finally finishing up at Thorns. Meanwhile the Walsall meetings continued, first at Bloxwich and finally to date at Sneyd. These Saturday afternoon three hour meetings are run once a month through the winter period with a short summer break. I became an ever present participant.

I travelled quite a bit in those days and took in meetings at various venues, Oxford, Bicester, Oundle, Wallingford, Peterborough, Moulton, to name but a few.

In 1997 I plucked up courage to ring Laurie Barr to enquired about the Cardington airship hangers and Laurie gave me the details on how to enter. It was April 13th when I first went and I will never forget my first view of the interior. I drove into shed No1 through a sliding door at the rear and passing from bright sunlight outside into the gloom of the shed my eyes took a second or two to focus. I was absolutely gob-smacked by the size of the place, If you have been there you will know what I mean, if not you really have missed something.



I think that's enough of my rambling thoughts for one month. I hope what finished up as something of a potted history of my early indoor experiences has proved readable.

I will probably follow up next month with some more on Cardington, I have real fond memories of my time in the sheds, We actually flew in both No1 & No2.

John Andrews

ALLEN-MERCURY "10" 1 c.c.

Manufacturers:
Allen Engineering,
Edmonton, London, N.9.

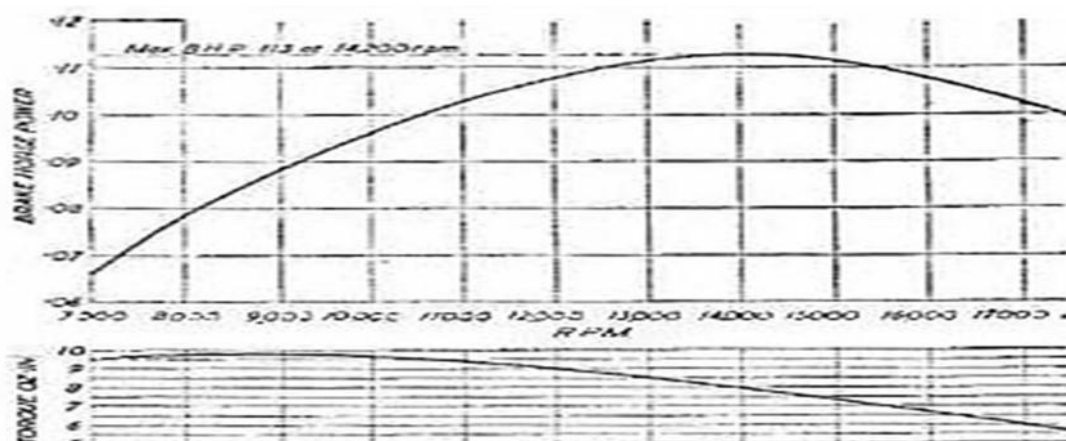


Retail price: 58s. 6d. including P.T.
Bore: .426 in.
Stroke: .430 in.
Bore/Stroke ratio: .99.
Displacement: 1.00 c.c. (.0614 cu. in.).
Bare weight: 3 ounces (including tank).
Max. B.H.P.: .113 at 14,200 r.p.m.
Max. torque: 9.8 oz.-in. at 9,000 r.p.m.
Power/Weight ratio: .38 B.H.P. per oz.
Power rating: .113 B.H.P. per c.c.

Cylinder, Piston,
Contra-piston:
Meehanite.
Connecting rod:
Turned from forged
Dural bar.
Crankcase: Pressure
die casting in LAC
112A light alloy.
Main bearing: Plain.
Crankshaft: S-14
case-hardened steel.
Cylinder jacket &
Tank: Dural,
anodised green.
Spraybar assembly:
Dural.

PROPELLER	R.P.M.
dia. — pitch	
8 × 5 (Stant)	8,800
8 × 4 (Stant)	10,000
7 × 6 (Stant)	10,300
7 × 4 (Stant)	11,800
6 × 6 (Stant)	11,700
6 × 4 (Stant)	13,900
6 × 3 (Trucut)	14,600
6 × 4 (Frog nylon)	17,000

Fuel: Mercury RD.



(Editor, I have been buried under a deluge of model pictures & descriptions and you are due to get the lot in due course, over to John to get things under way.)

All of my models in the pictures that follow, in the next few issues, are in flying order and get flown regularly.

Our Bournemouth club, of which I am Chairman, is now sadly depleted. Only Roger and Roy and Ted Horsey fly Free Flight.

Up until the covid restrictions came in we used to hold an indoor meeting every month but the cost of hiring the hall became prohibitive so that had to stop. I do my Radio flying with a small group on the site of the Dorset steam fair near Blandford where we have a 65 acre field in open countryside with not a house in site.

All of the planes are hangered in my garage with the car outside. For convenience of storage and transport most of my models are not bigger than 4ft span. I also tend to keep to a 2cell lipo battery to avoid too many batteries.

In a separate workshop I still have electric gliders and a couple of vintage gliders. Also I still have a Last Resort and a Scram.

I stopped modelling after I got married as life was hectic with three daughters. I was working at Rolls Royce Leavesden and after serving my apprenticeship finished as a quality control engineer. After 27 years there and the closure of the site imminent we moved. The site is now the Harry Potter theme park. If you can find a copy there is an interesting book about the site called 'From Halifaxes to Hogwarts'.

We moved to Bournemouth In the late 70` s . One evening a passer-by was admiring my display of Dahlias in the front garden, I was growing and exhibiting veg and flowers, that was my other passion, (along with dancing) when her husband Pete Redhead told her to hurry up as he needed to put another coat of dope on his model. My ears pricked up and I went to see his models and my interest was re-kindled.

John Taylor.

Playboy



This is a 54" version of the popular American playboy design by Joe Elgin. Wings are covered in white polyspan and the fuselage in So- lite.

The brushless motor gives 120watts on an 8"x6" prop. Battery is a 3 cell Lipo of just 850 Ma. Ready to fly weight is 19½ozs. Model climbs in a near vertical right spiral so you get lots of climb outs from even this small battery.

Fox Moth



The full-size plane was designed in the 1930's for short domestic routes. To keep production costs down Tiger Moth flying surfaces were used as well as the under carriage. The reliable Gypsy major four cylinder engine was the power-plant. This engine of only 120Hp flew the pilot and four passengers. 98 planes were built and some had the luxury of a sliding canopy over the pilot. The first owner of this machine in 1933 was the Prince of Wales.

In 1935 it was sold to Air Travel NZ, a pioneer airline, and now ZK-AEK became known as the Royal Fox. During its time it logged more than 8000Hrs.

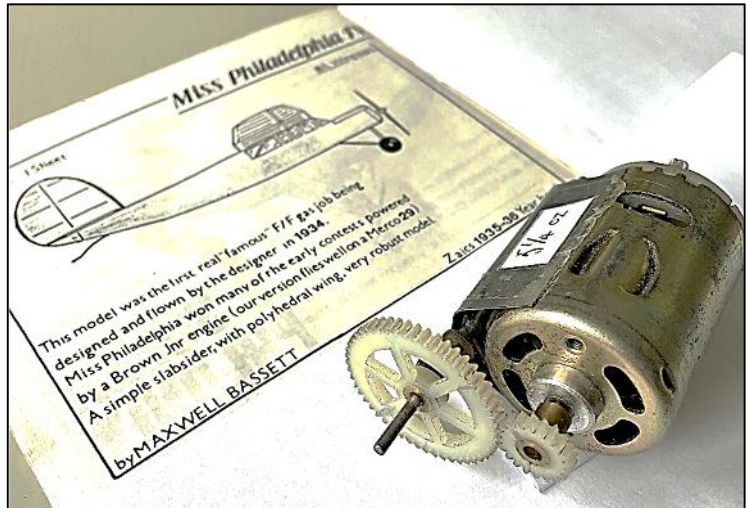
In 1943 the plane was caught in a down draught over the New Zealand southern alps and the pilot crash landed on a glacier with no loss of life on board. The plane was carried down the glacier by sledge, men and finally on a raft. It was rebuilt and after passing through the hands of several owners finished up in Fiji.

My model is 1/10th scale at 36" span. The fuselage is covered in Oracover and the wings are covered in Polyspan and doped and then a light spray of silver. The brushless outrunner motor gives 82watts at 7200rpm driving a 9"x4.7" prop. Ready to fly weight is 22ozs.

Miss Philadelphia

When David Baker died in 2009, Brian Yearly and Roger Newman took on the task of disposing of David's vast collection of models.

At the time my interest was in electric powered free flight. I asked Roger if there were any models suitable to convert to electric power. He came up with the Miss Philadelphia which was already electric powered. This model was built by Frank Smith of the Northampton club in 1991. Frank had scaled down the original 1934 design by Maxwell Basset, from 8ft span to 5ft. Frank used a 540 Buggy motor driving through a homemade 2.5 to 1 reduction gear



Maxwell's model was powered by a Brown Junior. I read somewhere that the engine was mounted upright to make starting easier. With the low thrustline and the wing mounted high above the cabin this must have given the characteristics of a pylon model and possibly made the model perform so well in competition.

I stripped the wing and added some diagonal struts to keep the wing flat. As it was my intention to install radio control, the fin and tail were stripped and a rudder and elevator were formed within the original outlines. The old Buggy motor which weighed 5½oz was replaced with a brushless motor. As the new motor was only 2oz the new power battery weighing 10oz was installed as far forward as possible along with the radio gear and hey presto the cg was spot on. The battery was a 7 cell NiMh. The wings and tail and fin were all covered in Polyspan and doped and given one thin spray coat from an aerosol.

The weight ready to fly came out at 2lbs 6 oz. not too heavy for a model this size.

The model climbs steadily and glides beautifully. Most flights are 15 to 20 mins, climbing out then a good glide. Catch some lift and the flying time soon mounts up. Best flight 39 mins.

Altogether a very satisfying project to see a great old timer airborne again.



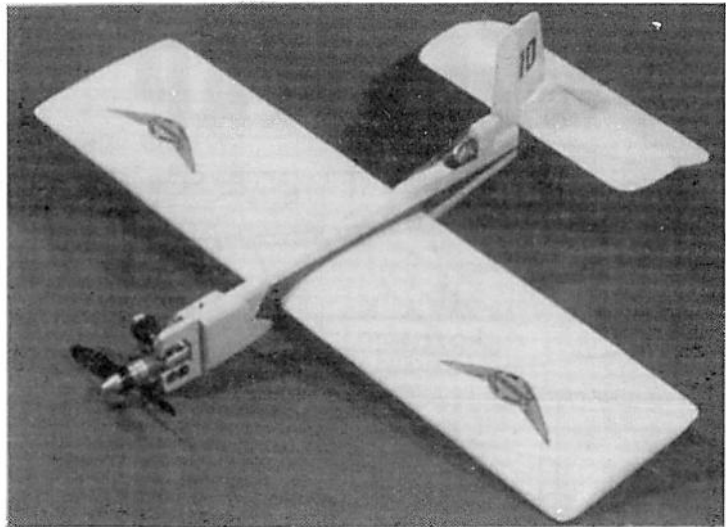
To be continued:

John Taylor

Extracted from the book 60 years of IVCMAC, courtesy Chris Vaughan

Your FULL-SIZE Plan of the Month

A 22 inch control-line stunter
for the novice modeller to suit
a range of engines. .8-1 cc



SWEETHEAP

by Ray Malmstrom

OUR MUCH-RESPECTED EDITOR sent us by his most reliable (rubber-powered) carrier pigeon a demand, 'Get going on a stunt-combat job for the .049-1 c.c. diesel or glow engines – and make it the best!' We heard, marked, and inwardly trembling got to work! 'Sweetheap' was the result. We think you'll go for this bundle of action.

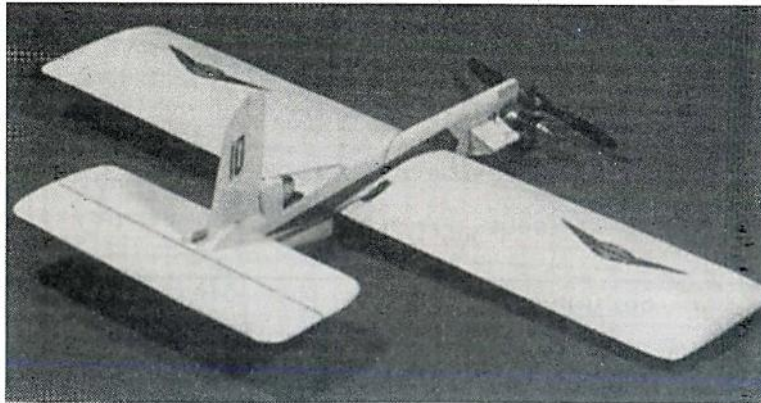
Designer Ray Malmstrom (left) and Test-pilot Ken Radford (right) of the Impington College M.A.C. in happy mood after Sweetheap's highly successful maiden flight.



Fuselage

This is simple and straightforward. Cut the basic shape from medium $\frac{1}{8}$ in. balsa sheet, carefully removing the wing cut-out and the cut-out at the rear of the fuselage. Cut notches for receiving the fin and engine mount. Make engine mount from $\frac{1}{8}$ in. ply and drill for the engine you intend to use. Cement this into the cut out at front of fuselage. Cement filling pieces A in place and finally $\frac{1}{16}$ in. ply pieces B. (See fuselage construction sketch). Cover cockpit with thin acetate sheet, installing a 'profile' pilot, if desired. Add $\frac{1}{8}$ in. piece C, and the $\frac{1}{16}$ ply skid. Carefully sandpaper fuselage to section shown. Cover the rear cut-out area with tissue and water shrink. Construct tailplane making sure the elevator moves freely on its linen or tape hinges. Do not install the control-horn at this stage. Give tailplane two coats clear dope. Cement to fuselage, checking that fin slot on tailplane and fin slot cut in rear of fuselage coincide. Cut fin from $\frac{1}{8}$ in. sheet, and carefully off set rear portion as shown. Dope as for tailplane. Cement fin firmly in place, the lower front edge fitting into the slot already cut at the rear of the cockpit fairing and the tab into the slots cut in the tailplane and fuselage. Give the completed fuselage two coats of clear dope, sanding lightly between each coat.

Cut bellcrank from $\frac{1}{16}$ ply (or use a commercial bellcrank of the same size). Connect the control rod to the bellcrank. Solder a small washer on the control rod as shown (Fig. 1). Cut the bellcrank mount from $\frac{1}{16}$ ply and assemble bellcrank and control rod to it, soldering the lower nut on to the pivot bolt as shown on plan (Fig. 2). Cut two ribs (W1) from $\frac{1}{16}$ ply and assemble bellcrank mount unit to these ribs. Check that the ribs are at right angles to the mount (Fig. 3). Add $\frac{1}{8}$ sq. blocks (Fig. 4). Now pin the lower $\frac{3}{8}$ in. x $\frac{1}{8}$ in. mainspar, that runs the whole span of the wing, over the plan. On to this spar is lowered the bellcrank – centre ribs assembly. Cement accurately in place. To keep the ribs correctly aligned you can use the jigs X and Y cut from $\frac{1}{8}$ sheet. Use modelling pins to hold everything in place while cement dries.



Slender profile is misleading, this 'Sweetheap' is tough though simple, flies through most manoeuvres like its bigger brothers. Original has a Cox .049.

Take care with this important part of the wing construction (Fig. 5) Add the other balsa ribs (W2) noting that all port ribs have cut-outs to accommodate the lead-out wires. As you slot ribs W2 on to the lower mainspar you can check that they are correctly positioned by using jigs V and W in the same way as you used, jigs X and Y. Add upper mainspar and finally leading and trailing edges. Wing tips are cut from lengths of medium 1 in. sq. block, carved and sanded to shape, the port tip being drilled and bushed with brass tubing for the lead-out wires. These should now be installed (cut over-length) through the tubes and ribs and connected to the bellcrank. (Fig. 6). With bellcrank in the neutral position, cut the other ends of the lead-out wires off level, and form hooks. Cement $\frac{1}{4}$ in. sq. lengths of balsa between centre ribs (W1) reinforcing the leading and trailing edges (Fig. 7). Finally cover the top and bottom of the centre-section with 1/16 in. sheet noting cut-out in the top sheeting to allow free movement of the control-rod. Lightly sandpaper the entire wing and cover with Modelspan tissue. Water shrink and give one coat of clear dope. The wing can be pinned to the building board supported on leading and trailing edge jigs V and W as shown in the small sketch on the plan. This keeps the wing true and prevents warps (most important) while firstly water and then the dope dry.

Assembly of wing to fuselage

The wing can now be installed pushing through the wing cut out in the fuselage. When in position and at right angles to the fuselage it can be firmly cemented. Add about $\frac{1}{4}$ oz. weight to the *starboard* tip. Now cement the tailplane 1/16 ply control horn into its slot in the elevator

and connect up to the control rod. Check that when the lead-out wire hooks are level the elevator, is at neutral (flat). You can adjust this before the cement holding the control horn sets. Then cement $\frac{1}{8}$ sq. pieces either side of the control horn as reinforcement, and cover the top surface of the tailplane, where the control horn slot was cut, with a small piece of linen or nylon tape. Solder a small washer to the end of the control-rod after it has passed through the control-horn to retain the control rod in position. Araldite a Mercury commercial stunt tank in position as shown.

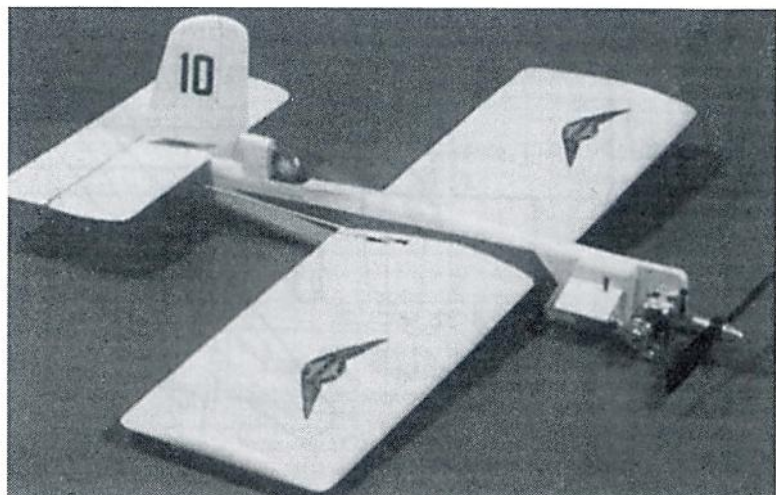
Decoration

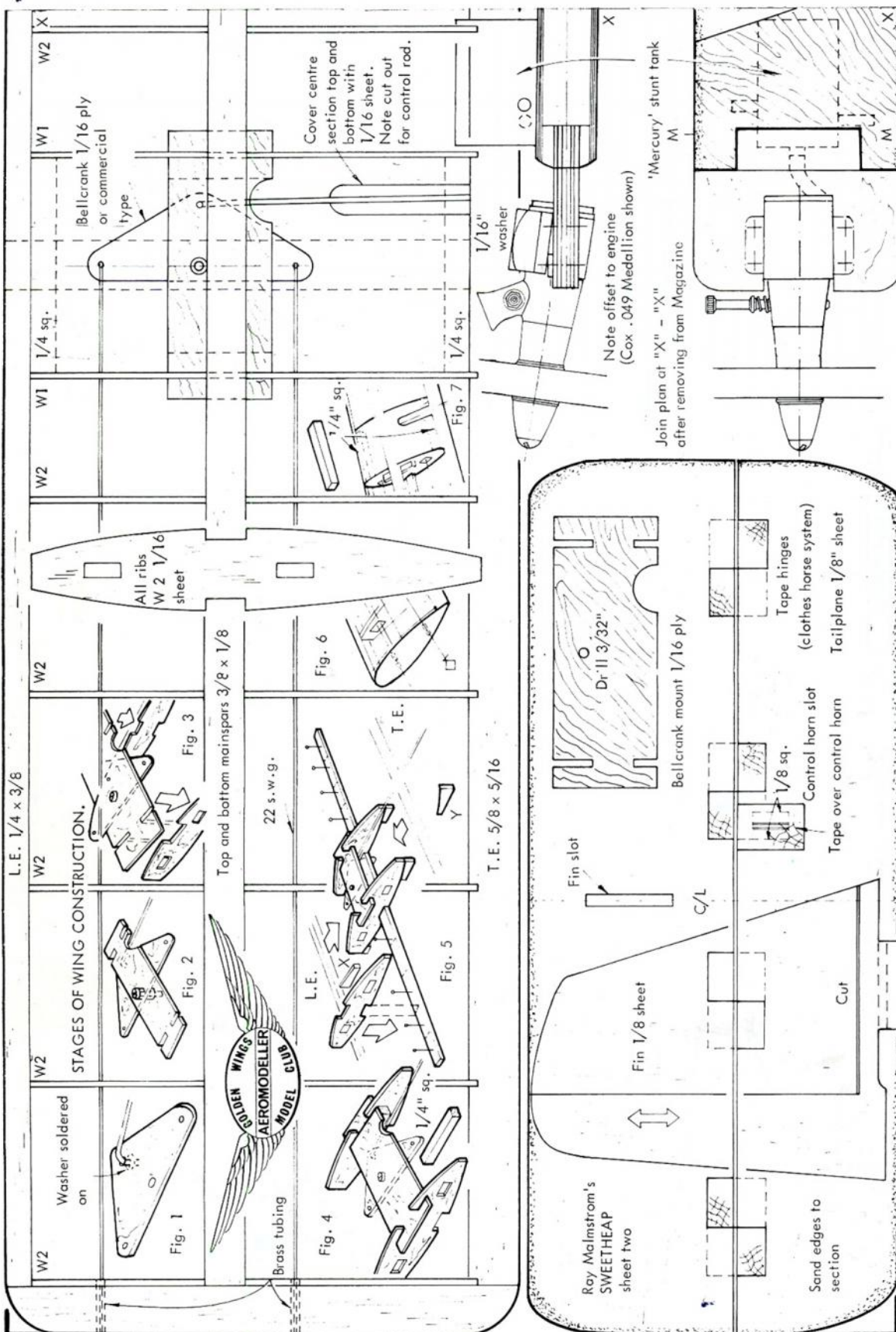
Go over the whole model carefully with a fine grade sandpaper and eliminate the 'bumps' before application of your final finish. You can now paint your 'SWEETHEAP' and decorate it to your own scheme. If you use Humbrol enamel paint you need not (for all normal fuels) fuel-proof your model. Any transfers you may use, must of course, be protected by fuel-proofer. Bolt your engine to the engine mount, noting the 1/16 thick washer, which gives the engine the necessary offset. See top view on plan. This offset will help to get you out of trouble if those lines ever go slack, so be sure you incorporate it as a safety factor!

Ready for flight

Connect the engine to the Mercury tank with a length of neoprene fuel-tubing and your SWEETHEAP is complete. It should balance on the FRONT lead out wire. You may need a small amount of nose or tail weight to obtain correct balance depending on the weight of the engine you use. Fly on 30-35 ft. steel lines. Good luck – and be seeing you – *inverted* of course!

Ready for action! The Golden Wings Club transfers signify how suitable 'Sweetheap' is for the novice or junior modeller especially those wanting to learn how to do their first loop or to fly inverted.





Here in the first picture is me at the famous circular table at Wallop. The date was 1997 and it was the Jaguar anniversary competition which unfortunately was won by an American gentleman. This picture is my first flight with Dennis Davitt timing and John Ralph taking the picture, it was a perfect climb out and maxed easily. Not so the second when it spun in and ended my attempt. I was lucky enough to win the trophy in 2003 with the same repaired model. In the second picture it shows one of our nights out, left to right Dennis Davitt, me, Alan Nobbs, Eric? (from Essex), John Godden and Stephen Lacey, the picture was taken by Ken Attiwell. We were at one of our favourite watering holes, The Eagle at Abbots Ann. We used to drive down from the North and stop off at Stephens for lunch then down to Wallop. We had further excursions on an evening with Cleemac to a pub I have no idea where it was but they had a skittle alley and a buffet supper and it used to be a really good night. It must have been a tremendous blow to the Museum and all the hotels and pubs around Wallop in the loss of income that they must have suffered.

Happy memories,



Joe Northrop



LOCKHEED'S JET FIGHTER

BASED on the XP-80, the Lockheed P-80A "Shooting Star" single-seat photo reconnaissance plane and fighter was the second jet-propelled aircraft to go into service. Intended for the Pacific theatre, the collapse of Japan came before it could become fully operational.

The original XP-80 was powered by a De Havilland "Goblin" jet unit, but production models were fitted either with the General Electric Corporation type I-40-9 or I-40-11 gas turbine.

Protective armour surrounds the pilot, and the bubble-cockpit has the usual bullet-proof windshield. An interesting point is that the nose portion is interchangeable for either combat or P.R.U. and combat purposes. The armament and cameras carried can be varied accordingly. The fuel-tank is situated in the forebody in front of the jet unit and immediately behind the pilot.

For ease of access to the gas turbine quickly-detachable panels are fitted to the mid and aft sections of the fuselage.

The main wheels retract inwards into the mid centre section and the nose-wheel retracts backwards and turns through 45 degrees.

The cabin is pressurised for high-altitude flying and to safeguard the pilot against

explosive decompression in the event of the canopy being punctured in combat, the pressure is automatically reduced when he turns his gun-button switch to "fire." Air-conditioning, with temperature control, supplies air in proper quantity.

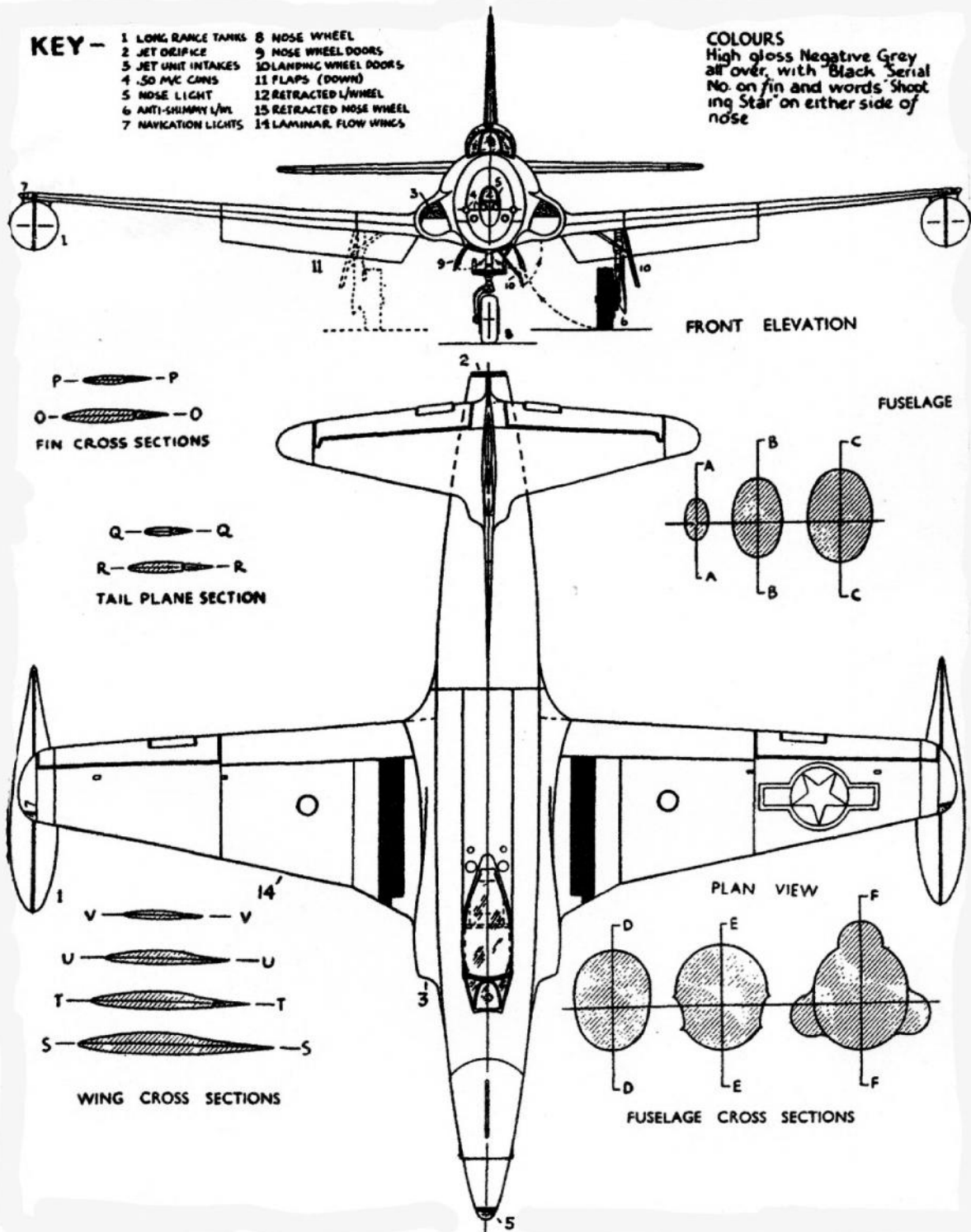
The service ceiling is given as more than 45,000 ft. and with the wing-tip drop-tanks the range is greatly extended. To relate a recent exploit—a P-80 piloted by Col. William H. Council flew from Long Beach, California, to La Guardia Airport, New York—2,470 miles—in 4 hours 13 minutes and 26 seconds non-stop, thereby cutting the existing record by nearly an hour. This was on January 26th, 1946, and was done by the assistance of a considerable tail-wind, as much as 100 m.p.h. at 20,000 ft. rising to 165 m.p.h. at 40,000 ft. quoted by Chanute Field weather station near Chicago. Even then for a jet-propelled machine the airborne duration is an outstanding performance.



THE LOCKHEED P-80A "SHOOTING STAR" ⁹¹

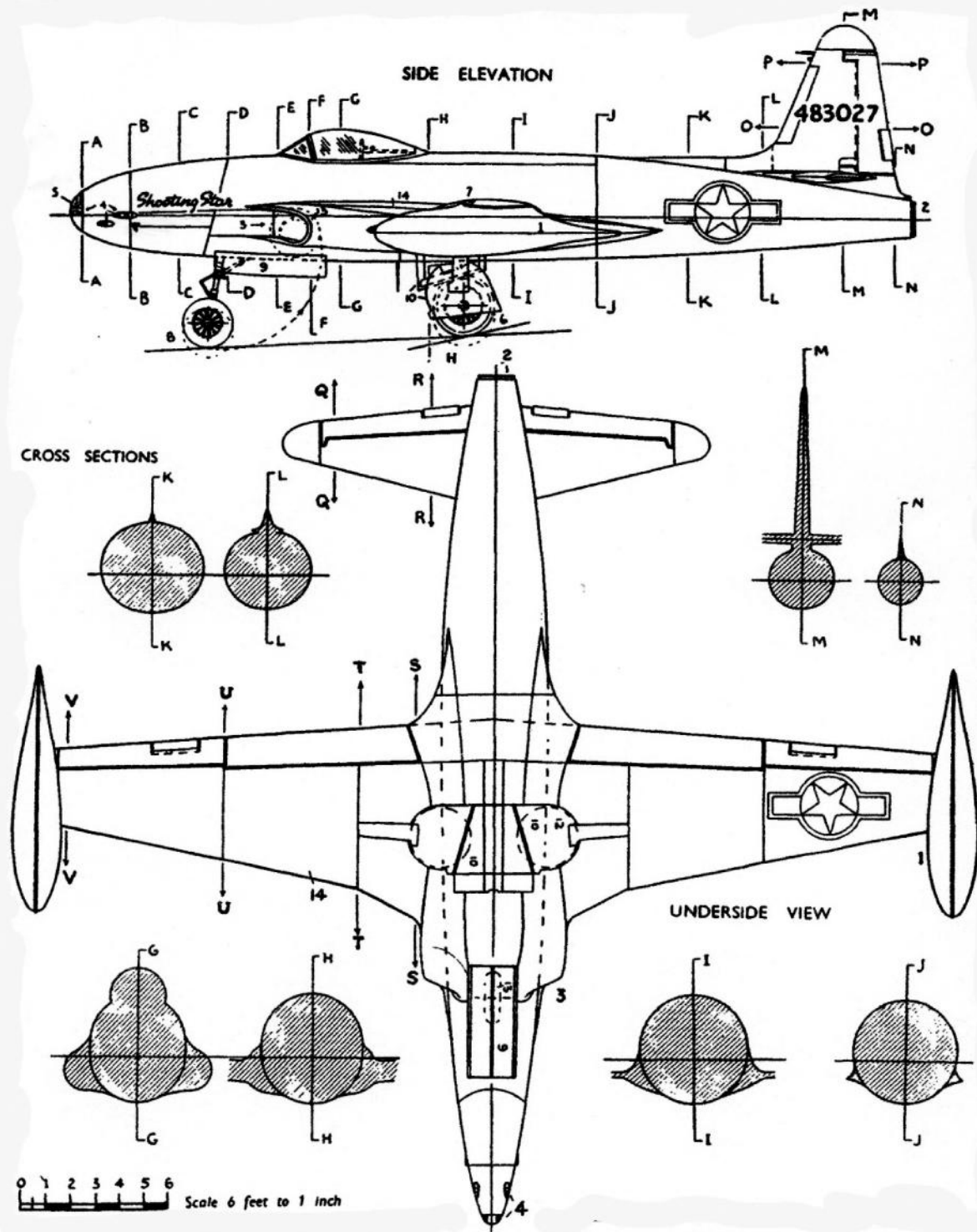
- KEY -**
- | | |
|---------------------|-------------------------|
| 1 LONG RANGE TANKS | 8 NOSE WHEEL |
| 2 JET ORIFICE | 9 NOSE WHEEL DOORS |
| 3 JET UNIT INTAKES | 10 LANDING WHEEL DOORS |
| 4 .50 M/C GUNS | 11 FLAPS (DOWN) |
| 5 NOSE LIGHT | 12 RETRACTED L/WHEEL |
| 6 ANTI-SHIMMY L/W | 13 RETRACTED NOSE WHEEL |
| 7 NAVIGATION LIGHTS | 14 LAMINAR FLOW WINGS |

COLOURS
High gloss Negative Grey
all over, with Black Serial
No. on fin and words 'Shoot
ing Star' on either side of
nose



Span : 38 ft. 10½ in. Length : 34 ft. 6 in. Powered by one General Electric I-40-9 or one
Beach, California, to La Guardia Airport, New York, 2,470 miles, in 4 hr. 13 min. 26 sec.,

JET-PROPELLED FIGHTER AIRCRAFT



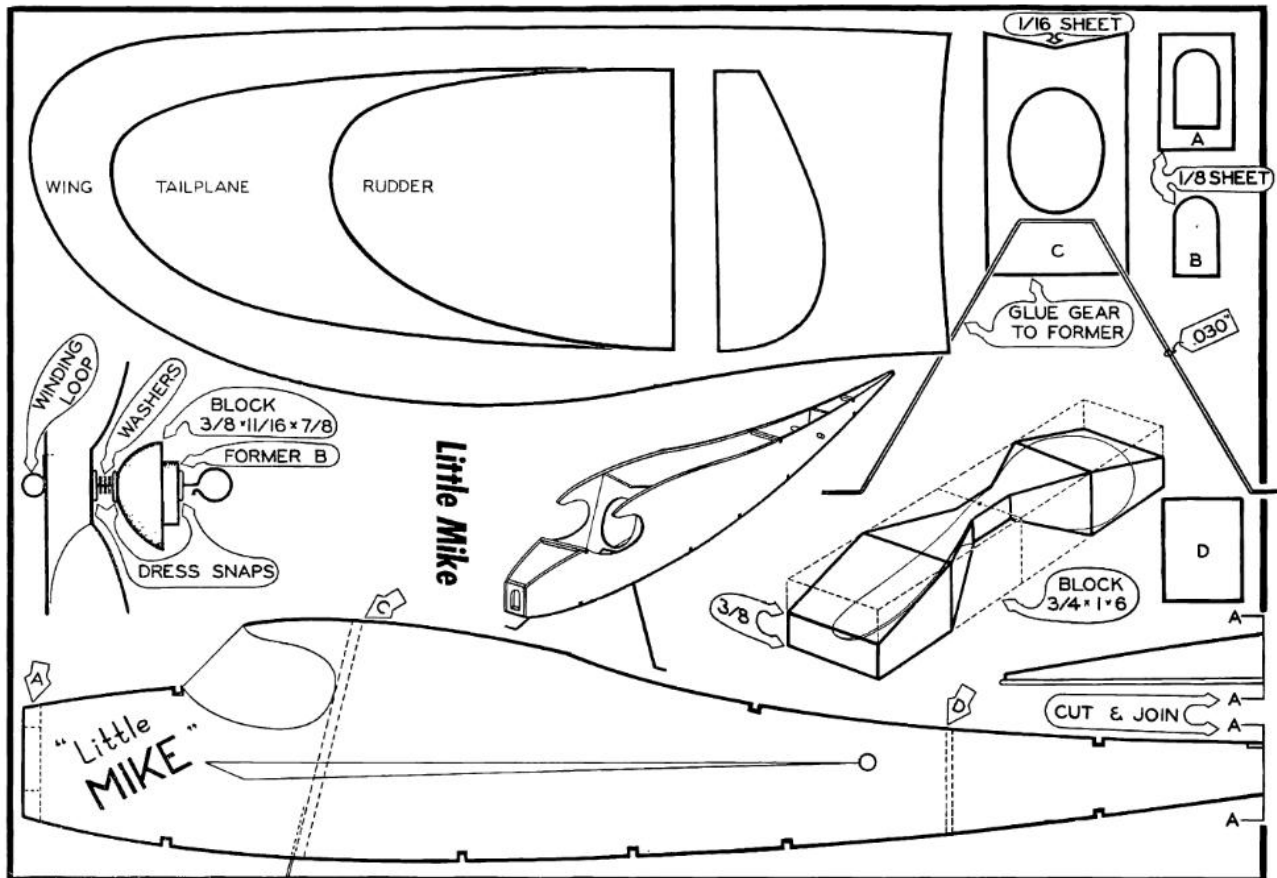
1-40-11 gas turbine. Armament: Six 0.50-in. machine-guns. One of these craft flew from Long the average speed being 584.82 m.p.h. This plan is reproduced from a "Veri-Tru" drawing.

III

Little Mike

Robert Hauk

Designed by Ed Lidgard and published in 1949, it has a 15" wingspan. The plan is available on Outerzone; it was published as a full size plan in Flying Models.



PLANS REPRINTED BY KIND PERMISSION OF "FLYING MODELS," 215 FOURTH AVENUE, NEW YORK 3, U.S.A.

I have searched for the perfect model for small fields, school yards, baseball fields and the like. Little Mike is one of the best I have found for this kind of flying. Our club hosts three contests in the late Summer and early Fall and with such a short contest season I end up doing a lot more small field flying so I am always looking for better small models.

This is a really fun little model, it is all sheet balsa and can be made from one 3" x 36" sheet of 1/32 balsa. It is light and rugged, and perfect for flying on a football pitch, or the local schoolyard. I carved the prop as shown on the plan and it is a very good one. It is really well sized for the motor; I think it works much better than the equivalent sized plastic prop and is well worth the extra effort.



I power mine with a loop of 3/16 tan rubber, 400 hand winds are enough for a nice 38 second flight. Mine is trimmed right right, and I have a pretty tight glide circle to make sure it doesn't take a long time to come down. This helps keep it on a small field when there is a bit of wind. When I am flying on a big field like the ones we use for our contests I make up a longer motor, typically a double loop of 3/32, about twice the hook to peg length. I braid this motor so it is well behaved as it unwinds. I can put 1200 winds on this with a winder, and then the climb out is spectacular. I have had it in thermals, and nearly lost it a few times. My longest flight was over 8 minutes; it landed about a half a mile away.

My friend Ben Strauss and I have been flying them for a couple of years, we like to get on the field early on contest days, right at sunrise if possible and enjoy some fun flying. I have flown mine at night with a small LED light attached. My partner Isabelle built one last Fall and it flies like the others.



Left to Right, Robert Hauk, Isabelle Brent, Ben Strauss



Little Mike climbing out

I enjoy decorating these small models, a little bit of color makes them look very good. You can keep it simple or get really elaborate to your taste. Mine is done with cut colored tissue; Isabelle did a very nice job with red art pen. We have discovered Faber Castel Pitt art pens, when dry the ink does not dissolve in water, and you can put coats of dope over it and it stays put. That is remarkable, and allows for some really nice decorations for no measurable weight gain.



3 Little Mikes, built by,
L to R: Ben Strauss; Isabelle Brent; Robert Hauk



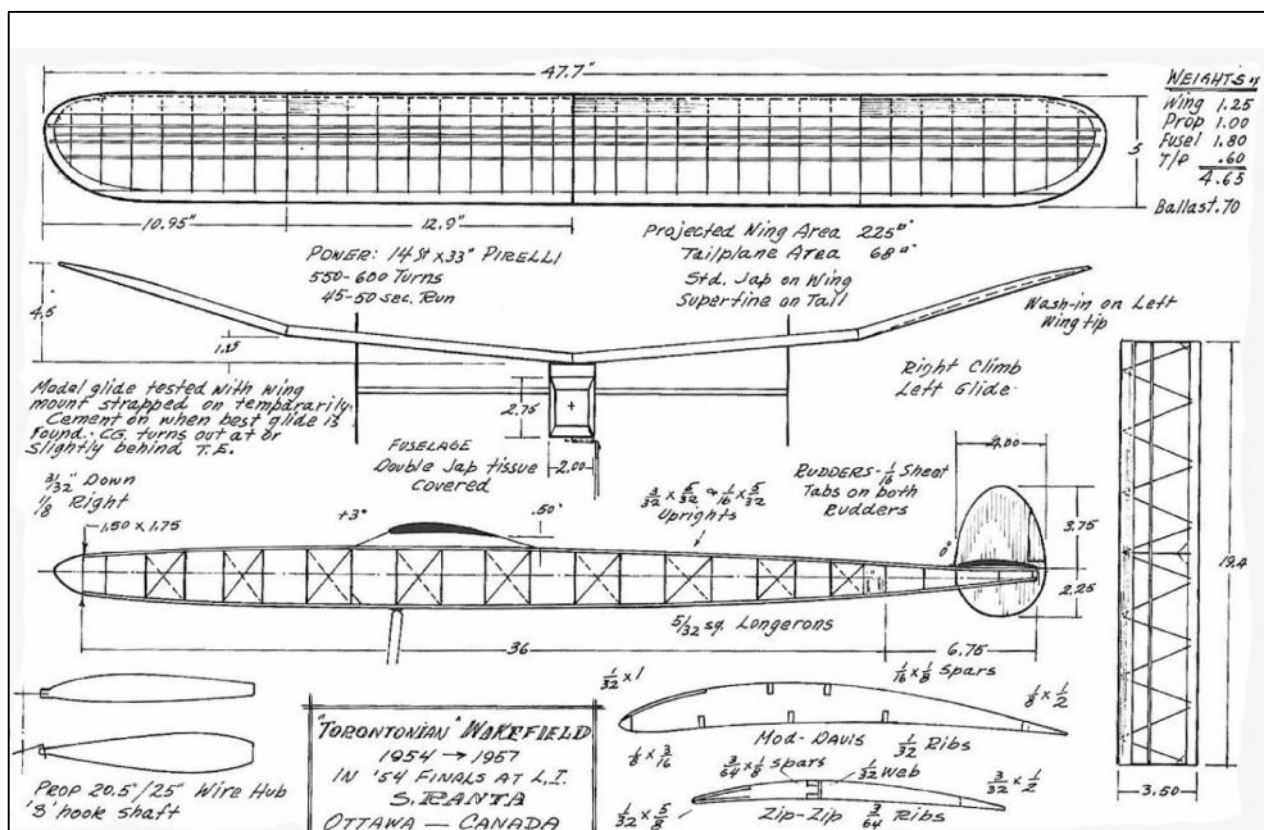
Isabelle launches,
these models have a very steep climb.

Others are building them so we can maybe do some real mass launches this season, the more the merrier.

Robert Hauk

Just noticed in the April Clarion the extract and plan for the Gerald Thomas Wakefield. Here is a picture of mine (built for me by Spencer Willis) which I hoped to fly in Classic Rubber at the Nationals. The other model is a Torontonion (built by me) from the same Frank Zaic Yearbook, 1957-58 but as yet unflown.





Peter Watt

498

AEROMODELLER July, 1946

NOW IT CAN BE TOLD! BY ROBERT JAMIESON



IT happened on VE night, in Auchengargle.

On that memorable occasion, an observer from Mars or the moon might have seen through his telescope a whole country giving itself over to a wild orgy of rejoicing. Had our observer focussed his instrument on a certain Scots village, however, he would have seen something vastly different from the nation-wide riot of celebration. He would have seen a strange-looking figure, clad in a kilt and a top hat, clutching a model aeroplane under one arm, and a squawking seagull with several tail feathers missing under the other. He would have seen this well-meaning individual—accompanied by several other young men—fleeing in terror of their lives; pursued by an angry mob who uttered shrill cries, brandished sticks and gathered stones for missiles as they ran. The leader of the pursuit was a gaunt figure clad in a Tam-o'-shanter, a moth-eaten plaid and a long flowing nightgown—the tail of which was badly scorched. A sorry ending indeed to a day so full of promise. However . . .

When it became evident that Germany had "had it," and that the end of things in Europe was only a matter of days, the Auchengargle M.A.C. immediately prepared to celebrate victory in a fitting manner. The Maestro was almost in tears as he visualised the delights of peace.

"Think of it, lads," he said, his voice choked with emotion, "plenty of balsa in the shops again—rubber and dope and everything—it seems too good to be true."

It was indeed a golden prospect for all good aeromods; but first victory had to be celebrated, and in the work of planning a beanfeast McGillicuddy was never the man to let the grass grow under his feet. With quiet pride in his bearing he produced his plans.

"Rocket planes," he said. "We'll give the folks a real show—and the club will get a big boost at the same time."

"And where did yer get the rockets?" asked Snooky Munroe.

The Maestro gave him a dirty look.

"If you would just take things as they come, Snooky, without bothering about where they came from, you'd

maybe get on a lot better," he told his questioner severely. "As a matter of fact I—hum—er—get them from a friend of mine in the Home Guard—I've got the models all ready, too—but we canna try them out—not enough rockets to spare."

"Will the celebration committee allow us to give a demonstration?" I asked.

The Maestro treated me to a smile and a wink.

"In the bag," he told me. "McSwindle's is chairman—and while him and I don't maybe agree while's—he'll not let the club down."

Waiting for McSwindle to arrive, McGillicuddy outlined his plan.

"We've got six planes—and rockets for them. We'll let them off one after the other in quick succession—that will catch everyone's attention—then we'll give a demonstration of all our other models."

"Both of them?" put in Snooky Munroe.

McGillicuddy was riled. "If some members of this club," he said severely to no one in particular, "would spend their time building instead of making daft remarks to their betters, we'd maybe get somewhere."

Snooky—who realised just how far he could go without provoking the Maestro to violence, now retired to a corner, and pretended to sulk. But the occasion was not one in which petty dissensions and quarrels could flourish. The happy expectation of great events soothed over old sores, and made all members brothers. We gathered round and pressed the Maestro for more details of his plan for the forthcoming celebration. But he would say little.

"Wait till McSwindle gets here, lads," he said, "then we'll see."

The man in question entered at that moment, looking highly excited. All present turned towards him, but he had eyes for no one but McGillicuddy. "Maestro," he said, without any preamble, "you'll need to lend me your kilt. I'm taking a leading part in the tableaux." He struck a dramatic attitude. "I'm to represent the Spirit of Scotland!"

Dead silence greeted his words. No one knew what to say. Unfortunately, just at that moment, Drambuie—the Maestro's pet seagull—uttered a squawk which had a decidedly derisive and sarcastic ring. That broke the spell. Several members tittered, and even the Maestro could not resist smiling. McSwindle flushed angrily.

"Some day I'll wring that blasted bird's neck!" he declared.

"Nobody will abuse that poor innocent bird while I'm here!" McGillicuddy retorted. "I'm thinking poor old Scotland must be pretty hard up for spirits when they pick you."

"Did you tell them that we were willing to give a demonstration?" I asked, anxious to get down to the business in hand before the Maestro and McSwindle came to blows.

"Deed and I did nothing of the kind," McSwindle declared, turning angrily round on me. "This is to be a victory celebration—no a schoolboy's outing. Besides, if you were there the whole thing would just be a frost—you would spoil the tableaux—and you know I've always wanted to act."

The Maestro faced him sternly.

"Am I to understand," he asked, "that you never even put our offer before the committee?"

"You can understand anything you like," retorted the would-be actor. "But if you think I'm going to let a crowd of model aeroplanes interfere with my acting, you're sadly mistaken."

"So you've let the club down," McGillicuddy said, more in sorrow than in anger. "And you want to borrow my kilt forbye."

"Surely you don't grudge me it?" asked the aspirant for thespian honours.

Slowly McGillicuddy shook his head. "No, Colin," he said slowly, "you'll no make an exhibition of yourself

in my kilt—and in years to come you'll thank me for refusing you. It's a kindness I'm doing you. Have you seen your legs?"

McSwindle lost his rag and let it rip.

"Ach—the whole lot of you are jealous," he roared. "Model aeroplanes! I'm through with the club. I'm going to see that you're kept out of everything I've got to organise." And he flung himself out of the club, slamming the door behind him.

Consternation reigned. It looked as though our victory display would never come off. But McGillicuddy did not seem in the least perturbed. He smiled to himself, and rubbed his nose with his forefinger.

"I wonder just what he'll wear—seeing he hasnae got my kilt?" he mused.

The members turned on him angrily.

"Never mind 'im," cried Snooky Munroe. "What are we goin' ter do—no demonstration—and it's all the fault of that there seagull."

But the Maestro refused to be ruffled.

"Tach—don't worry, lads," he said calmly. "We'll give the folks a show that'll be talked of for generations to come. We'll put Auchengargle M.A.C. on the map with a bang. Trust me—we'll show them!"

"Yes—but how—why?" demanded the members.

"Listen," said McGillicuddy, "they'll be holding their show on the green in front of the 'Bonnet and Bagpipes' pub. Well—we'll put on a show without permission. It'll be victory night—no one will object—they'll all be too happy. You know the wee shed the Home Guard used to have? Good! We'll assemble all our stuff behind that. We'll release all our six rocket planes at once—to draw their attention; then—well, it's up to us. You know we can do it."

On the face of it, the Maestro's plan seemed feasible enough, and—for a wonder—everyone supported it enthusiastically. All hands set to repairing and servicing models. The club was united. This was victory.

McGillicuddy concentrated all his attention on his rocket planes. With furrowed brows he began to sketch rapidly on the back of an old plan.

"If the thing's going to be a success, Bob," he said to me, "these six rocket planes have got to go off simul—simul—all at once."

"It'll not be easy, lighting six rockets all at once," I objected.

He smiled happily at me.

"Tach—Bob—you've no imagination," he told me. "Look—it's easy."

He completed his sketch with a few swift strokes and showed it to me. It was a typically McGillicuddy idea. Six rocket planes on the launching rack—with a weird looking arrangement of strips of sandpaper and matches to ignite the touchpaper when a string was pulled.

"I hope it works all right," I said.

He nudged me playfully in the ribs.

"Ach—you're a hopeless pessimist," he informed me. "Of course it'll work all right."

With the happy atmosphere still predominating, all worked with a will. The launching gear was soon completed. The only snag encountered during the building was that of finding a suitable string to use as a "rip-cord." At last the remains of an old fishing net was pressed into service, and seemed capable of taking the strain, despite its somewhat strong smell. The Maestro was jubilant. "Well, lads, we're ready. Let victory come when it will—we'll show them."

We did. But hardly in the way we had intended.

(Continued overleaf.)



(Continued from previous page.)

The world will long remember the terrific news on that Monday night. In the wild joy of the moment, the members were all for setting off the rocket planes at once; but the Maestro held us firmly in check.

"No, lads, no," he insisted, firmly but kindly. "Tomorrow night is victory night. We owe a duty to the village. We'll show them what the model aeroplane club can do. Just you wait."

With such a thrilling prospect before us, the waiting period was something of a strain, but we got through that night without any untoward incident.

Early next morning we all assembled at the club, an atmosphere of hilarious goodfellowship prevailing. As the morning wore on, however, a feeling of strain became evident. Would our demonstration go off all right? Would the revellers appreciate our contribution to the celebrations? Would the prestige of the club get the boost we desired for it? No one said anything, but the unspoken thoughts of all were evident, and even the Maestro wore a thoughtful look as the morning wore on.

It was Snooky Munroe who broke the silence. His words echoed all our thoughts.

"Bit of a risk—setting off rocket planes in front of a crowd—I mean—not having tried them out first."

McGillicuddy's reply was mild, considering the circumstances.

"True enough, Snooky; but what else can we do? We've no spare rockets."

The rest of the day passed off quietly enough, and it was only as we were preparing to cart our gear and models down to the green that Snooky gave voice to the words that darkened our horizon with foreboding. As the Maestro locked the clubhouse door, Drambuie jumped to his usual perch on his shoulder. As he did so, Snooky turned on us indignantly:

"That's done it now! With that there bird included in the party, something's sure to go wrong. I feel it in my bones—"

"Then your bones are just kidding you," the Maestro roared indignantly. "It's always the same—when anything goes wrong, you always try to pass the blame on to this poor, innocent bird."

Strangely enough, the Maestro's outburst had a rather reassuring effect. It was at least heartening to know that McGillicuddy was his usual rather irascible self. In this mood we arrived at the green where the celebrations were to take place.

Right in the middle of the open the huge bonfire was erected. Already the usual crowd of small boys were milling round it. Hordes of folk—young and old—serious and giggly—strolled around or stood still, in the manner of all crowds, just waiting for something to happen. We cached all our stuff behind the shed, appointed Snooky as a sentry-cum-guardian, and mingled with the crowds till it was time to start something. The Maestro was in jubilant mood.

"This is the night, lads," he said. "I'll bet our show puts their tableaux an' aw that sort of nonsense right in the shade. We'll stop the show—you mark my words—it'll be a riot!"

At long last the pageant started. The crowd reacted well as it recognised the village characters in their historical roles. Farquarson—the village bobbie—got a big hand when he appeared as King Robert the Bruce. And a terrific burst of applause greeted McSwindle when he came on—looking very sheepish—as the Spirit of Scotland. Lacking the Maestro's kilt, he was attired in a long, white garment—strongly reminiscent of an old-

fashioned nightgown. A tam-o'-shanter, a moth-eaten plaid, and a shepherd's crook completed his incongruous costume. Pleased with the ovation he had received, his face wore a self-satisfied smirk. The Maestro turned away from the spectacle in disgust.

"Man Bob, it's terrible," he said to me. "Imagine that man, one of our own members, making an exhibition of himself in public like that—"

Suddenly his expression changed, and he gripped my arm.

"Drambuie," he cried. "I've forgotten to feed him!"

I couldn't understand what he meant, but following the direction of his gaze saw that Snooky Munroe had deserted his post and was watching the show with his hands in his pockets. Away beyond him I glimpsed a familiar white bird—he had something in his beak and was engaged in a frantic tug-of-war. With a thrill of horror I realised that it was the "rip-cord" of the rocket release.

"It's the fishy smell of that net we used!" the Maestro roared. "Run, Bob—!"

But it was too late. McGillicuddy's firing gear worked only too well. With a ragged WHOOSH six rocket planes hurled themselves into the air—unfortunately, they were not too well aimed directionally. . . .

The first caught Drambuie dead a-stern, and sent him—squawking lustily—to the Maestro for protection. The second got entangled with an ice-cream cart, going about the green on its lawful occasions in pursuit of business. The unfortunate horse—convinced that hostilities had restarted—immediately stampeded and caused the crowd in its vicinity to do likewise. The third landed square on the bonfire, igniting it prematurely, thus depriving one of the village bigshots of an occasion for which he had been long rehearsing. Yet another went plop into the midst of some maiden ladies, who immediately went into hysterics. But the worst of all was the rocket plane which caught McSwindle bending, ruffling his dignity and ruining his costume.

Without the last incident, the affair might have passed off without a riot—but as it was . . .

The Spirit of Scotland gave vent to a bull-like roar of rage which drowned the yells of the crowd. With quivering fingers and staring eyes he pointed—and drew all eyes in our direction.

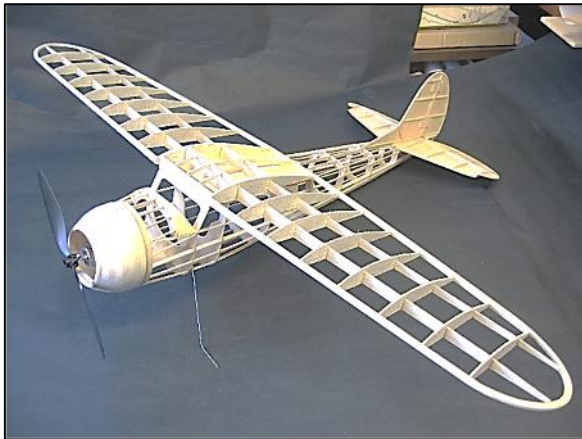
"It's them!" he shouted. "They've done it on purpose—they wanted to show off—and I wouldn't let them. They're just a public nuisance, the whole lot of them."

Mob psychology is a strange thing. The crowd—startled by what had happened—might have just laughed in relief, or else—goaded by the raging McSwindle—got tough. Unfortunately for the Auchengargle M.A.C. they decided on the latter. . . .

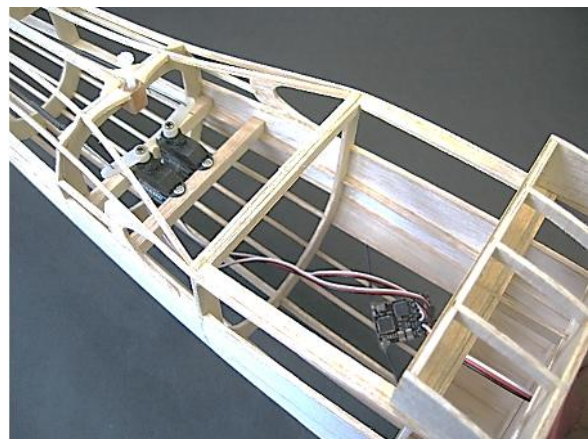
That is why, at the beginning of this narrative, I remarked that an observer from another world, peering through his telescope, might well have wondered at the scene in Auchengargle that night. With Drambuie under his arm, and all our members beside him, Maestro McGillicuddy scrambled from the field; pursued by the crowd he had meant to entertain. A sorry ending to Victory night; a poor reward for what was intended to be a public service.

About a year has passed since that night. Rumours and counter rumours flew about afterwards. The most scandalous stories were put into circulation by disgruntled parties. It is only with the intention of letting the truth be known that I have set down the foregoing. Now, at last, it can be told.

Continuing the build of the Earl Stahl Cessna 195



Bare bones January 2021



Servo installation and rear wing attachment

This lockdown project proceeds slowly, but, at least, it is keeping me amused and my mind occupied. Assembling the structure made as described in the previous two articles gave a bare bones shot as shown above. The means attachment of the wing trailing edge is also shown above right. I have used the method described by Carl Dowdy for his Bug hand launched R/C glider (R/C Modeler, June 2001) where the nylon wing bolt (3mm dia. thread in this case) screws into a thread made into the end grain of a small spruce block. Not having a suitable tap, I filed a vee notch into a steel screw with the same thread form and used this to tap the hole. The thread thus formed was reinforced with thin cyanoacrylate adhesive. The block was attached to the top centre of former 5. This former was further reinforced with a 0.5mm ply face and balsa gussets. To position the hole for the bolt in the wing, I fitted a pointed peg in the screw hole so to mark the centre of the hole. As mentioned previously, the lower part of the TE in the centre section was 1/32" ply, and at the front of the centre section there is a 3mm dowel peg that locates in the top cabin structure attached to the fuselage.

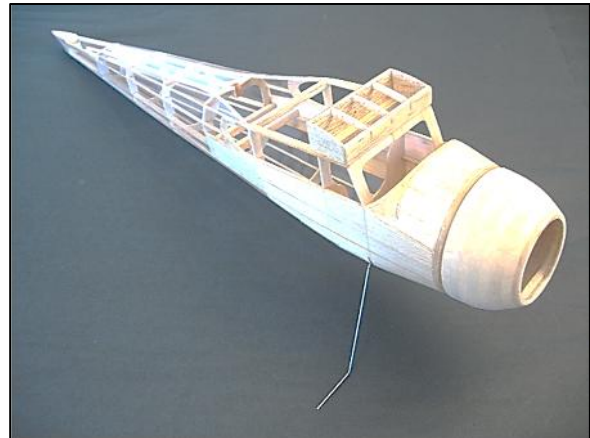
I found that the battery would fit inside the motor mount box. The designer recommends that the model should balance at the front wing spar, which appears perfectly reasonable, and is in line with where the CO₂ cartridge is shown on the plan. With the model assembled in its bare bones state to assess its likely CG, I decided to position the servos at the rear of the cabin, and so fitted two 1/4" square balsa cross pieces to the side keels in front of former 5 on which to mount these. The plan is to install the ESC in the space between formers 1 and 2, and mount the Rx on the rear of former 3 (in the CO₂ cartridge holder position).

Before covering, I thought it would be a good idea to work out the linkages between the control surfaces and the servos. The port side servo would connect to the rudder horn on the starboard side of the rudder, and the starboard servo controls to the elevator with the horn mounted on the port half. A piece of 2.5mm dia. dowel joins the two elevator halves. The connecting rods are lengths of 1.5mm dia. carbon fibre with 0.8mm dia. piano wire ends. The keepers are made from 0.5mm dia. wire. The parts are joined with heat shrink tubing. When all is ok a drop of cyanoacrylate adhesive can be applied to each end of the heat shrink tube to lock the joints permanently. The connecting link to the rudder has a Z bend where it emerges from the fuselage and the wire to the horn is made in two pieces to allow for adjustment. The control horns themselves are cut from 0.8mm plywood. Suitable pieces of sheet balsa were fitted to the rear of the fuselage to provide openings for the rods, and I checked that the connecting rods could be installed after covering.

The front of the fuselage was also infilled with pieces soft 1/16" sheet balsa to aid handling and improve the appearance and I scalloped the outside of the rear formers between the stringers.

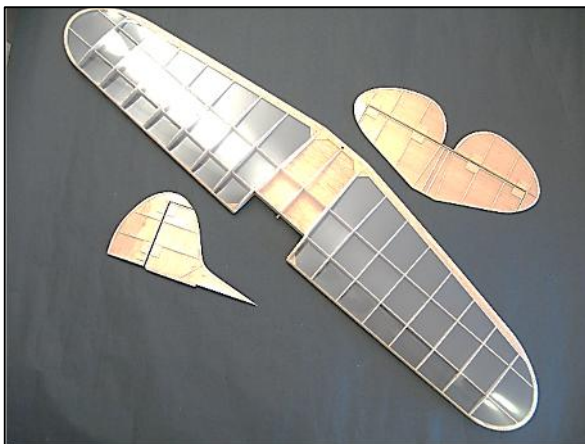


Control rods, elevator linkage top



Front fuselage sheet infill, Mylar covered rear.

So on to covering! Through an internet search, I had found an example of a Cessna 195 with a relatively simple colour scheme and no spats, tail number N1TB, which is overall yellow with blue trim. A number of photos of this machine are available on www.airport-data.com



Mylar covered flying surfaces

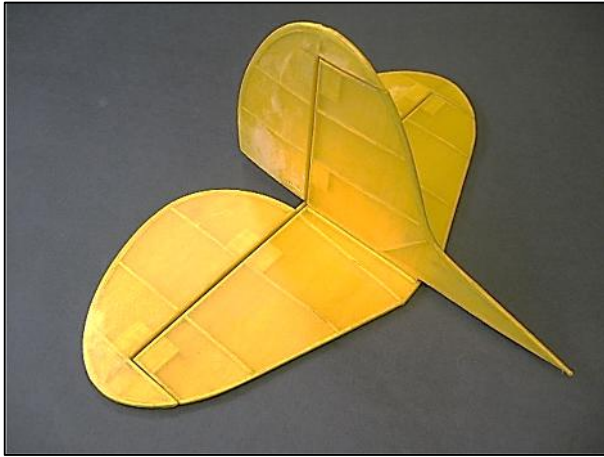


Full-size Cessna 195 N1TB

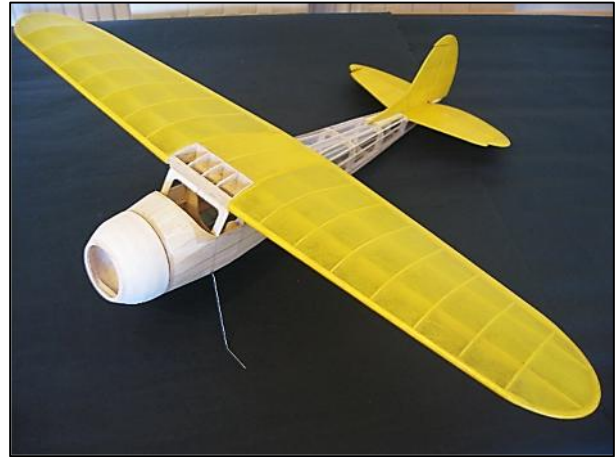
I find that the best conditions for flying these smaller models are generally early in the morning, when it is most likely to be calm - I am a fair weather flyer! Unfortunately, the air near the ground at this time is likely to be damp, which causes tissue covering to slacken and wrinkle, which probably has little aerodynamic effect, but does not look so pleasant. To avoid this problem, I have covered the model with tissue over 5µm Mylar. David Lovegrove has published a particularly useful and detailed description of this technique in 'Sticks and Tissue' No 76 (March 2013). Back issues of this newsletter can be found at: -

[S&T Archives \(sticksandtissue.yolasite.com\)](http://sticksandtissue.yolasite.com).

So, I covered the open structure with the Mylar attached with Balsaloc. The flying surfaces are straightforward, the fuselage was covered in three pieces, one each side from the stringer below the cabin windows to the centre keel at the bottom and a piece on the top of the fuselage. When the Mylar overlapped at the joins, it was held at right-angles to the surface and trimmed back with a piece of sharp razor blade. A coat of thin dope was applied to the Mylar and dampened yellow light Esaki Jap tissue attached with thin dope. Two coats of thin banana oil were then brushed on.



Tail feathers before the first coat of banana oil

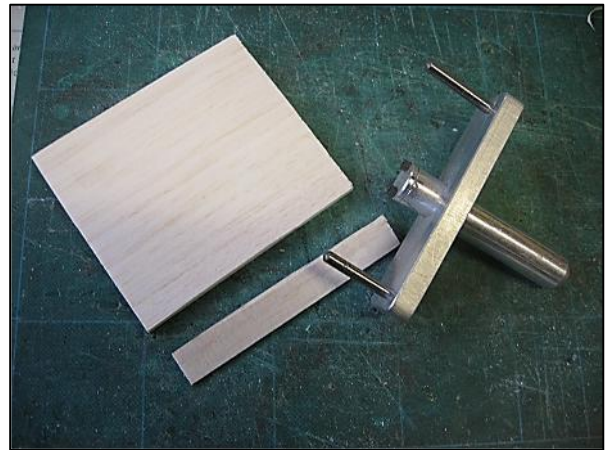


Assembled model with covered flying surfaces

Any white blushing from the damp tissue disappears when the first coat of banana oil is applied. Prior to covering the tail surfaces I had added a piece of 1/8" balsa to the base of the fin and a couple of rib strips to the top of the stabiliser, so that the fin could be located onto the stabiliser.



Tapered form on 1/4" sheet used to make cowl blisters



'TE' section stripped off.



Tear drop section formed and end rounded. The clamp is just holding the piece in position for the photo.



Blisters glued to cowl and attachment of sheet balsa UC fairing.

The cowl blisters to accommodate the rockers are not shown on Earl Stahl's plan, but are quite prominent, as can be seen from the photo of the full-size machine. For their manufacture, I chose to use the method described by Jim Young for his beautiful Waco YMF-5s (two sizes) in *Flying Models*, March 2008 and November 2010 editions, using a trailing edge section of wood.

A triangular form was cut into a piece of $\frac{1}{4}$ " sheet balsa using a razor plane and separated off using a balsa stripper (this method of forming trailing edge sections was recommended by Andy Crisp in an article in SAM35Speaks, and I also used it for forming the $\frac{1}{8}$ "x $\frac{3}{8}$ " trailing edges for this model). The triangular section was then sanded to a teardrop shape, and one end marked to the depth of the cowl blister and sanded round to match the profile of the bump. This was then separated off with a razor saw. The required 14 cowl blisters can be made relatively quickly in this manner, although, of course I made a few more, and used the better ones. The position of the blisters were marked on the tissue covered cowl with a soft pencil and a thin strip of paper the length of the circumference of the cowl at the rear of the bumps marked off into 14 equal spaces. The balsa blisters were attached to the tissue covered cowl with balsa cement and given a couple of coats of sanding sealer.

The photo showing the blisters attached to the cowl also shows the undercarriage fairing attachment. Earl Stahl suggests that these are attached to the wire with silk. If I'd had some yellow silk, I might have used this, but I attached the balsa fairing with lightweight glass-cloth using Deluxe Materials Eze-Kote. Once dry the excess glass-cloth was sanded away.

To be continued.

Nick Peppiatt



Cessna 195	
Role	Light personal and business aircraft
National origin	United States
Manufacturer	Cessna Aircraft Company
First flight	1945
Introduction	1947
Primary users	United States Army United States Air Force
Produced	1947-1954
Number built	1,180 ^[1]
Developed from	Cessna 165

Report No. 123 More new arrivals.

Last month I reported on the supply by Martin Dilly of the last three issues of **Free Flighters of New Zealand (FFoNZ)** newsletter, A bit tongue in cheek I enquired of Martin whether he had any more and whilst the answer was in the negative he did suggest that I contact another Martin, surname Gregorie, who hailed from New Zealand and is now resident in the U.K. Firstly I checked for the name Martin Gregorie in the "Plans in Mags list" and found DELTA G Mk 2, 4, 6 and 9 and ENTROPY, all A2 gliders, also FAST FREIGHT a version of George French's Half A Train power model. My plea for **FFoNZ** was promptly despatched and received a prompt reply.

Hi Roy,

It looks as though I have complete sets (6 issues each year) of FFoNZ for the years 1998 thru 2003.

I also have SIN (South Island News) 2/1969 to 3/80. I think this is a complete sequence though there are apparent gaps, but I think those are all simply not published rather than missing.

Minor corrections on my model names: I have an MSc in chemistry, so my glider designs were naturally called 'Entropy' and 'Delta-G' (the symbol is a triangle followed by 'G') for Gibbs Free Energy. Only the last Entropy version was flown in the UK. The first of the Delta-G series flew in 1975 (as both straight tow and with a home-made circle hook, B8405 wing and B8403 tail sections.

DG2 used the Elton Drew Maxaid twang hook - this was what I flew in the Bulgarian WC.

DG3 had a Monson section - which was useless.

DG4 used a spruce I-beam spar and glass-covered D-box and Hatchek hook.

DG4C used carbon+spruce wing spars and a thin Clark-Y tail - gave a much faster/higher zoom.

DG5 was the same but with a rolled balsa boom.

DG6 had an upgraded spar and introduced an inverted L arm that held the stab TE down with a 10BA trim adjuster screw.

DG7 had a B6556 wing - not as good as the B8405, so never repeated.

DG8 used Koster electronic timer and moulded carbon front end which became standard.

DG9 had full-depth Russian carbon spar, carbon D-box, M&K towhook, Koster timer and Woebbeking section tail with carbon D-box structure.

I spent much of 1976/77 working in New York and spent a lot of time with Bob Hatchek, hence Hatchek circle hooks in all models - still with open wood wing structures: the original DG4 version. This is what I flew in the Denmark '77 WC and the Australian WC in 83. I flew the DG8 variant in the '93 Californian WC and the DG9 in Hungary, 2003. Since then I've been flying a Glasflugel 201 Standard Libelle, which is why I've dropped out of the free flight scene. Thermals are much more fun when you're in them!

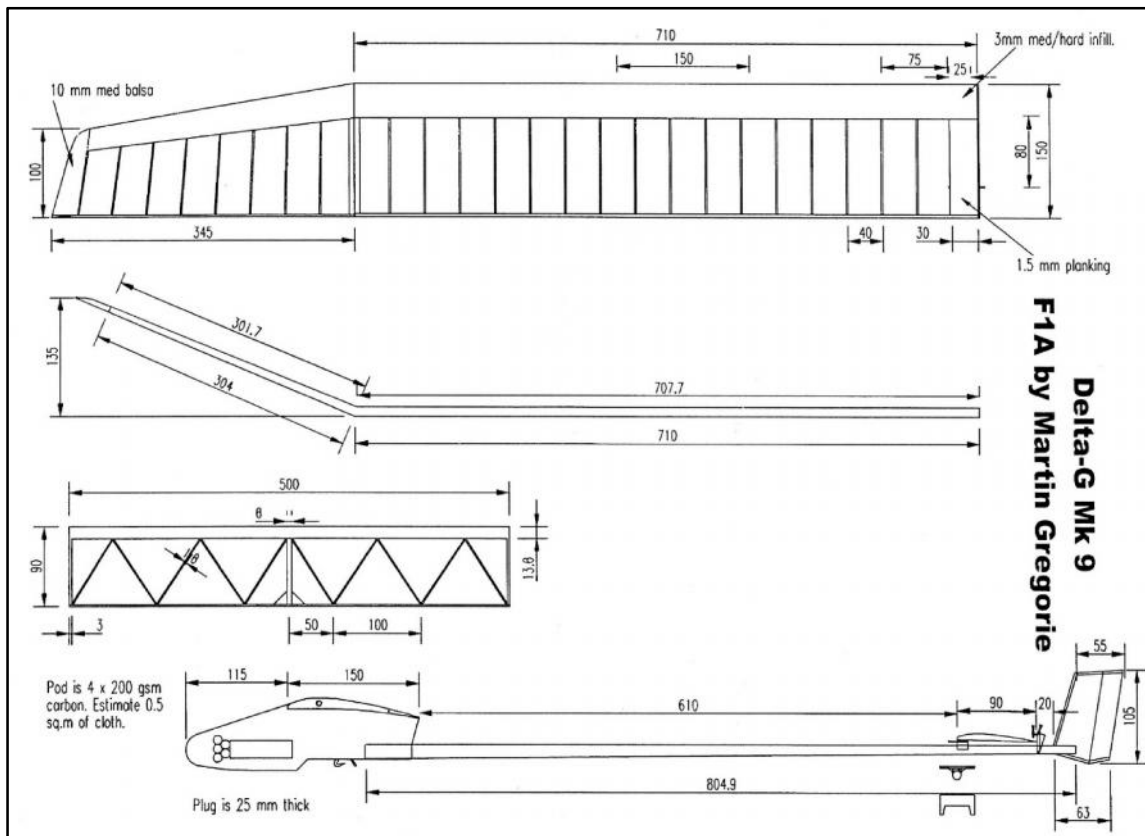
My 1/2A models were all based on the George French 1/2A-Train - I lowered the pylon and moved the wing back to get a 75% CG rather than 80%+, fitted VIT and autorudder, and split the wing in two with joiners through the pylon for easier transport, though the wing and tail structures are unchanged, so I called this variation "Fast Freight" as a nod to George (who, sadly, I never met).



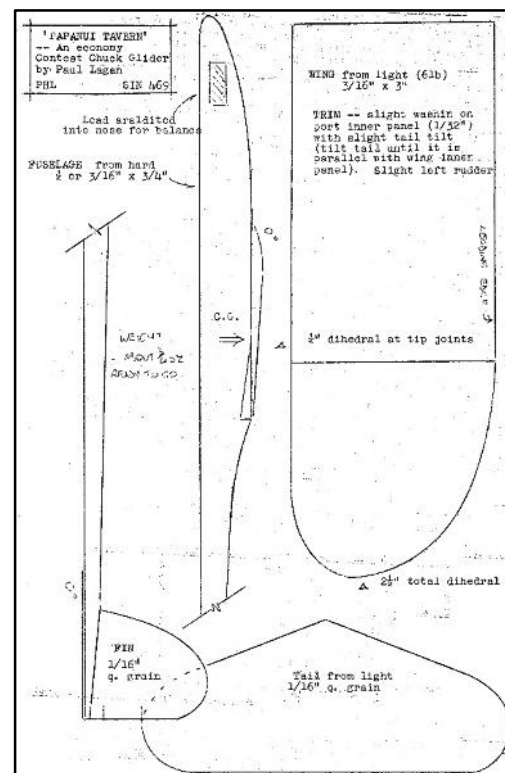
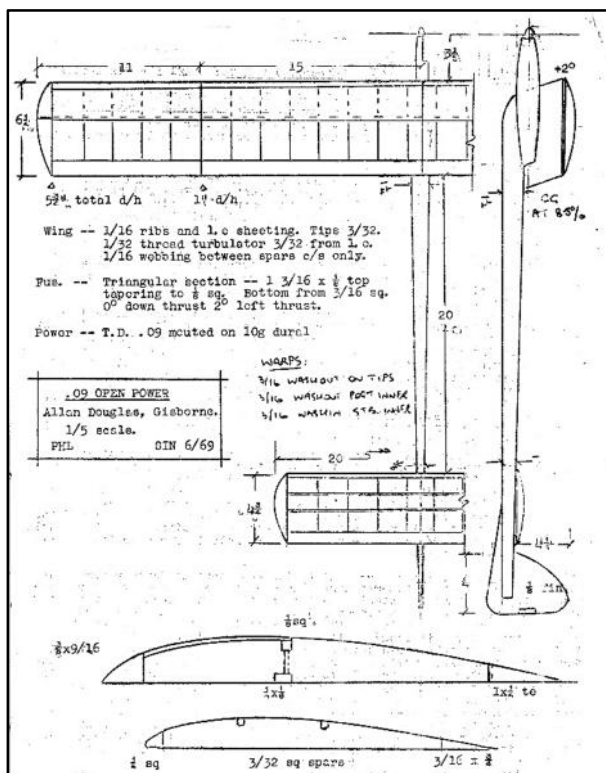
Glasflugel 201 Standard Libelle

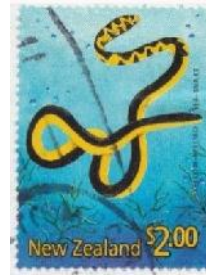
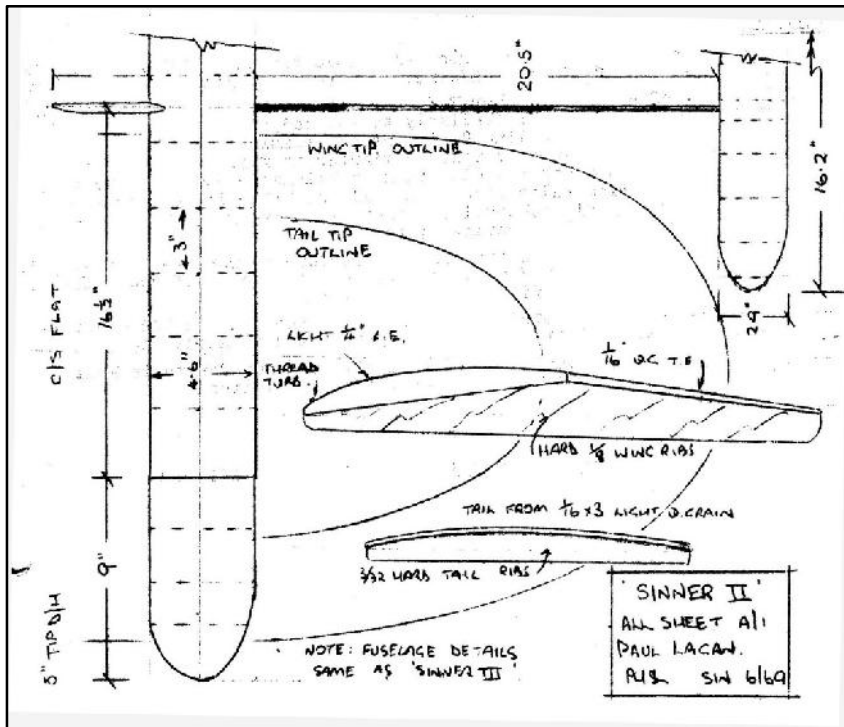
Anyway, as you can see I've a fair collection of unusual (in this country) NZ newsletters which I'm happy to pass on to you.

Thermals, Martin



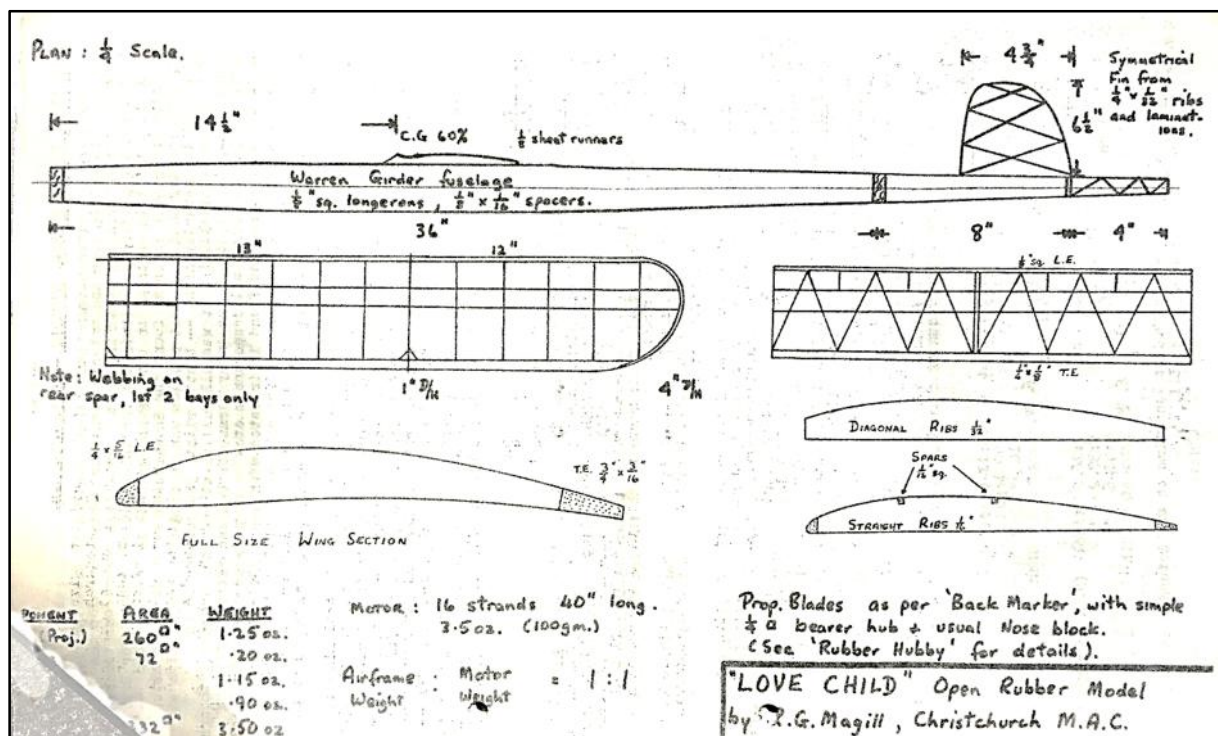
Above is Martin's Delta G Mk 9 from Free Flight News July 2003. A big thank you to Martin for donating to the library his collection of **Free Flighters of New Zealand** also **South Island News** and for considering the cost of post and packing to be a donation to the library. I decided to deal with **South Island News** first, being the smaller bundle, and show below some of the plans which may not have appeared before in the aeromodelling "popular press".





Most of the **South Island News** issues were produced on foolscap paper which at $13\frac{1}{4}$ ins is too big for my scanner. The Love Child plan was the only one which, as it occupied the whole page, would not fit the scanner and therefor the plan above is from an iPhone photograph, explaining the background colouration. Scans made at a "black & white" setting do what it says on the tin, just needing an application of the "rubber" to remove unwanted spots.

We now have a complete run of **South Island News** from No 2/69 published in March 1969 to the final issue 3/80 published in September 1980. Clearly there must have been a number one in 1969 and quite possibly issues for earlier years, any information on dates of earlier issues and the first issue would be most welcome.



Next month **Free Flighters of New Zealand** and/or other "New arrivals".

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

Roy Tiller

During the month a revised FFTC calendar has been released, together with a note from the BMFA explaining the cancellation of the Free Flight Nats - sad & unfortunate but necessary & somewhat expected. Let us hope that next year will allow the Centenary Event to be a long time remembered classic.

Thus the first Area meeting (actually the 3rd of the revised calendar) could take place on 25th April. As is its wont; Mother Nature ran true to form & produced a very nice sunny but extremely windy day - Beaulieu catching a steady 18-20mph "strong" breeze in the most unfortunate of directions. But no matter, a few hardy souls turned out & attended. Needless to say flying was minimal & for the brave. Messrs Cox, Etherton & Hook competing in Vintage Glider & F1C. David Cox flew an excellent first flight with his Nord, so excellent



that it maxed & went a very long way such that David was out for some considerable time & only managed that single flight. Dave Etherton had a couple of decent flights but his final one was catastrophic due to your's truly screwing up on communicating at the launch & letting go before Dave was ready - resulting in a broken wing tip. Profuse apologies followed - I put it down to old age & a complete lack of flying over the last fifteen months or so! Finally John Hook, flying one of Stafford Screens F1C power models; after sorting out all the gadgetry he got it on song with a splendid 4th flight & maxed out, but again a very long flight resulted.

The rest of us were just pleased to be out & meeting up to catch up with lost time.



Dave Etherton with Nord



John Hook preparing



John Hook launching



Dave Etherton preparing



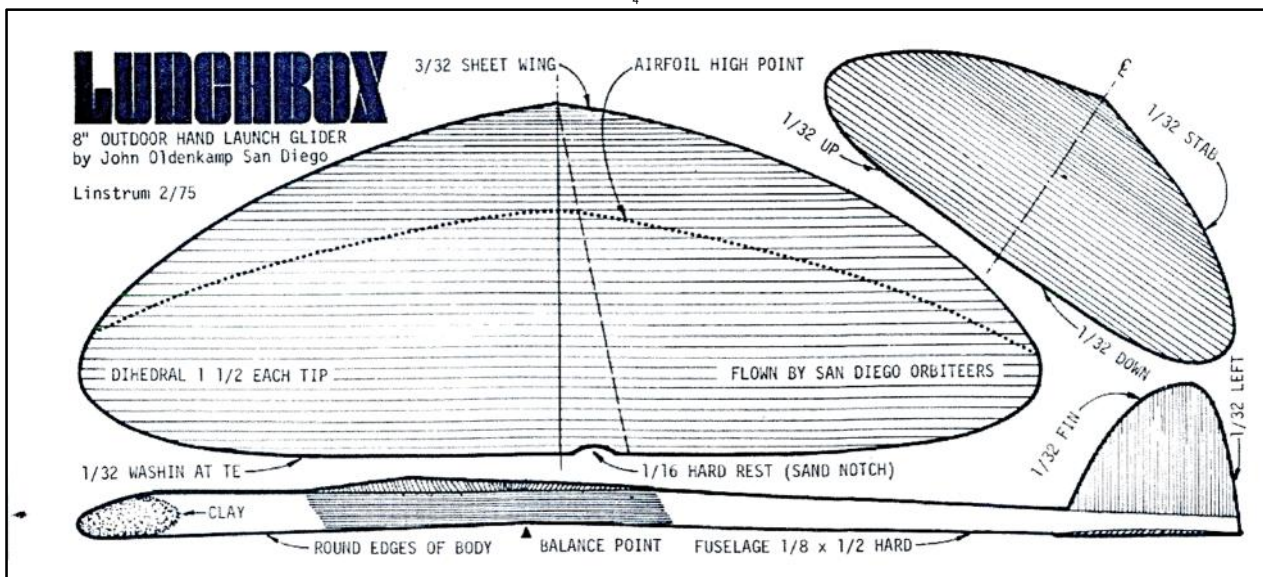
Three wise men contemplating a hot Rossi on song

Lifting up the lock down rules seems to be happening roughly to details published by the Government, so I am hopeful that we will be able to proceed with our planned meeting at RAF Colerne in July. Provided the May lock down targets are met, it should be possible to sort out the arrangements in time for publication of the June NC.

Not a lot else has happened. A couple of very small CLGs (modified Lunchbox) have been produced for my 6 year old great grandson & he has been successfully tutored in the art of launching & retrieving without treading on the model. We took him to the local park & he enjoyed over 1½ hours of galloping up & down flying & retrieving. I had completely forgotten how much energy is possessed by a 6 year old! It did inspire me to come home & build a Cloud Tramp for him.

LUNCHBOX by John Oldenkamp

Small, outdoor, hand-launch glider that can do it all for beginner or experienced chucker.
Developed for small fry, it's anybody's bird.



Lunchbox plan

Our Chairman very kindly breathed life back into a Banks Mills 0.5, which has sat in my (2nd) Mercury Magna for a long time, hence was well & truly gummed up - my grandson used to fly it many years ago & he is now 24! Airframe is fine, so this hopefully will get an airing in the not too distant future. As a footnote, the 1st one flew away at Middle Wallop on a short "final" flight of the day in days gone by - alas with another precious Banks Mills 0.5 on board!

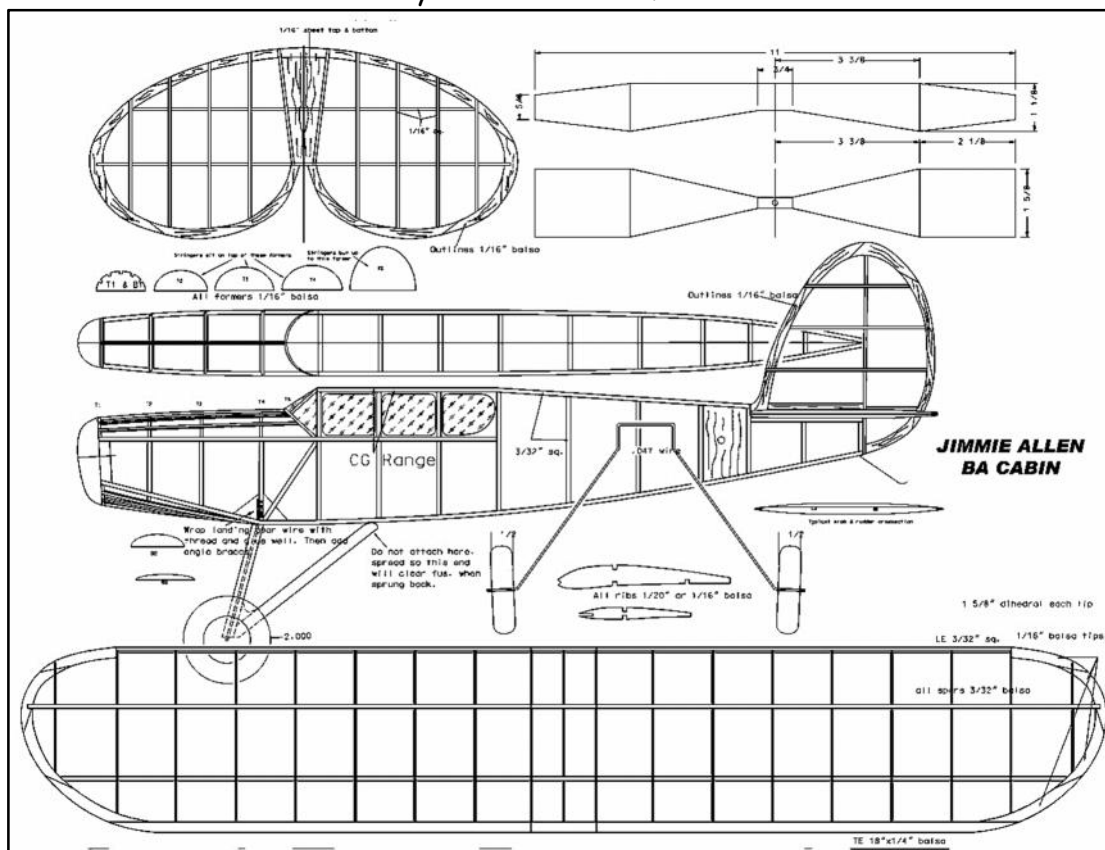
I note that the timeframe for the Classic A1 postal comp has been extended (I think) for the full year. Having found all the bits of my La Mouette & realised that the tissue rash isn't quite as bad as was imagined, it can be resuscitated & hopefully aired to have a go. The Ballerina remains uncovered & awaiting a burst of enthusiasm but is taking second place to the needs of the garden at present.

Finally NASA managed to make a very successful 1st flight of its little Ingenuity drone on the surface of Mars - a truly remarkable & historic achievement.

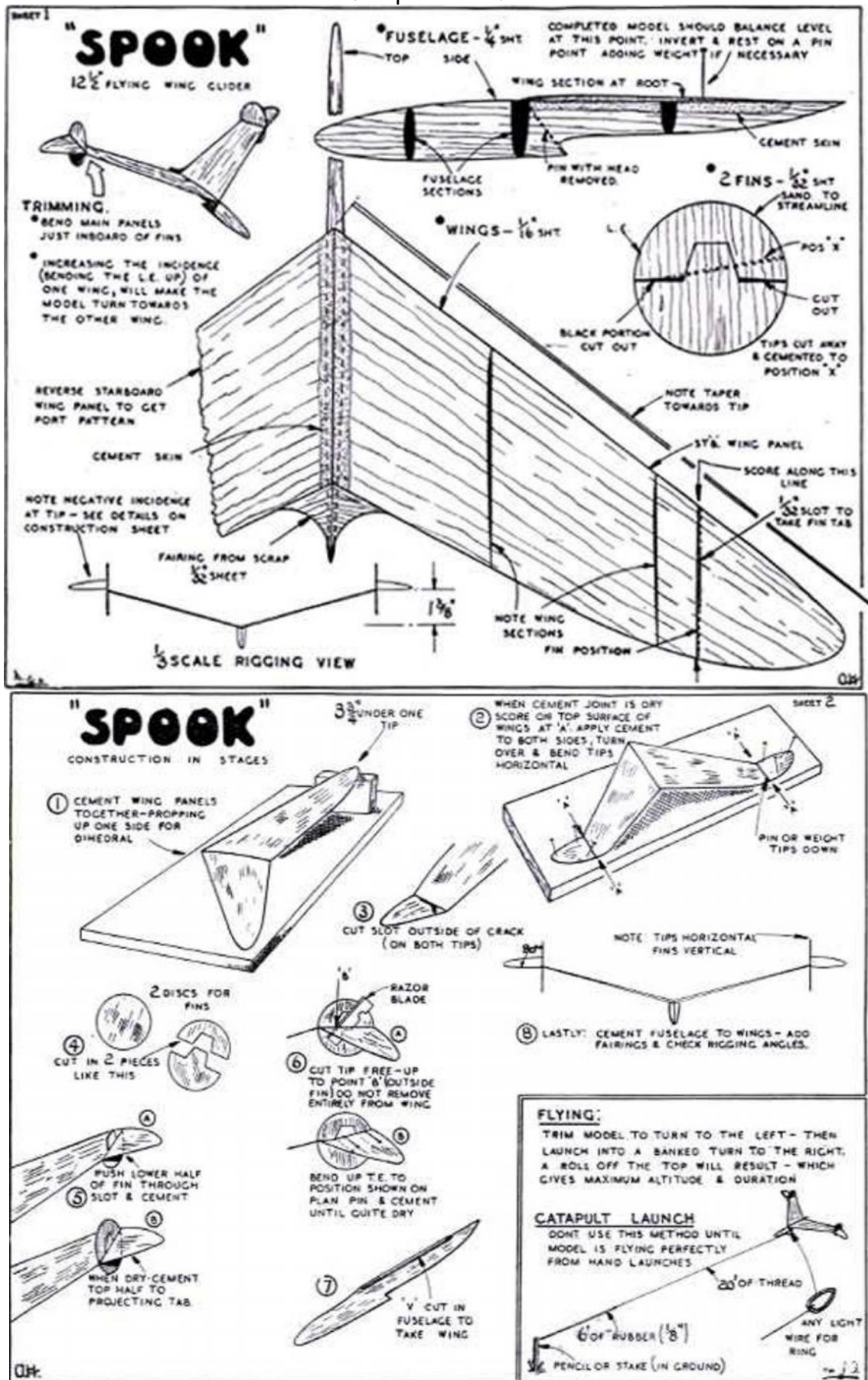


Ingenuity in flight on Mars

Roger Newman



Glider: Keil Kraft Spook also for old time's sake



For more details see write-up from Bill Dean's book in March edition of new Clarion

Roger Newman

Overcome by emotion at the prospect of the new normal I felt moved to some sort of high flown utterance. We all remember learning John Masefield's poem 'Sea Fever' at school don't we? With apologies to him I've adapted it slightly for this occasion.

COUPE FEVER

*I must go down to Salisbury again, to the lonely plain and the sky,
And all I want is a coupe d'hiver and a tracker to track her by.
And a dozen strands of Super Sport and a nice lunch taking,
And the alarm set for half-past six and a blue dawn breaking.*

*I must go down to the Plain again for the call of the Southern League,
Is a wild call and a clear call that we all must surely heed.
And all I ask is a nice calm day and the white clouds flying,
And plenty of thermals but not too strong and maxes five without trying.*

*I must go down to Beaulieu again, to the vagrant free-flight life,
Not a rainy day or a chilly day where the wind's like a whetted knife.
And all I ask is a merry yarn from a laughing fellow rover,
And a quiet sleep and a sweet dream when the long trek's over.*

Revised Coupe League Fixtures 2021

Date	Competition	Location
30 May	London Gala	Salisbury Plain
11 July	Fifth Area	Area Venues
15 August	Southern Gala	Salisbury Plain
t.b.a. early Sept midweek	Oxford Gala	Port Meadow
18 or 19 September* (tbc)	Crookham Gala	Salisbury Plain
9 October	Coupe Europa	Salisbury Plain

* Final decision based of weather forecast

Peter Hall

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

INTERNATIONAL POSTAL COMPETITION

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.

Events:-

P30. Models conforming to AMA rules . ie. 40g minimum airframe weight, 10g 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 jjmoseley@look.ca

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

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: stuardarmonf1a@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 classic1postal@gmail.com by sending the following information:

The name & contact email* of the entrant

The name(s) of the timekeeper(s)

The score, 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.

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: pjt2.alt2@btinternet.com



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 to 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 3rd 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

Gavin Manion - gavin.manion84@gmail.com

Revised

Southern Coupe League 2021

Date	Competition	Location
30 May	London Gala	Salisbury Plain
11 July	Fifth Area	Area Venues
15 August	Southern Gala	Salisbury Plain
t.b.a. early Sept midweek	Oxford Gala	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 CO2 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.

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.

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.

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.

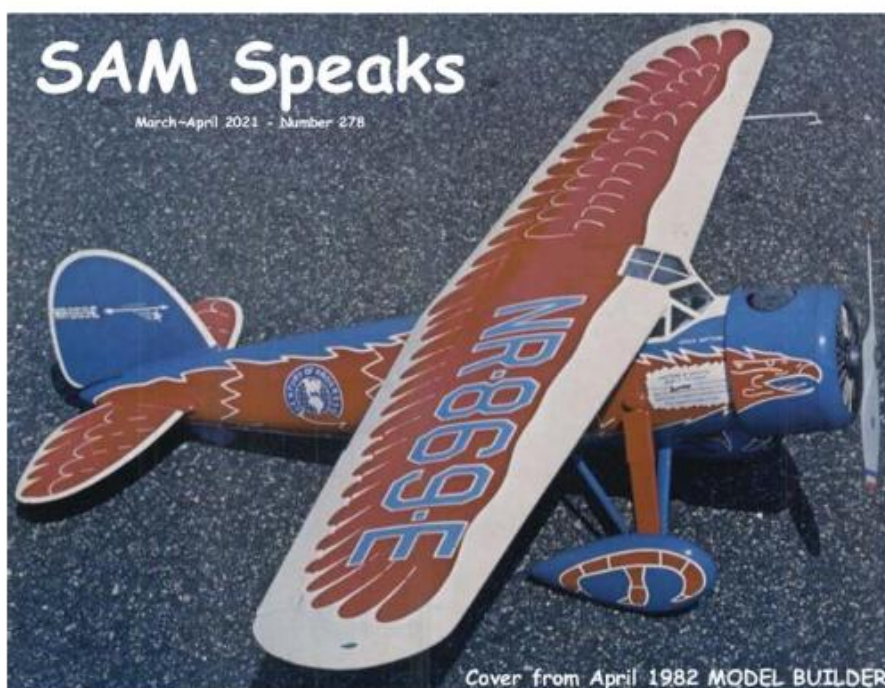
Contact Martin Dilly to order

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

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!



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 result of you-know-what ...xit and its effect on sterling), but it's still only £13 for a five yard roll a yard wide, 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: martindilly20@gmail.com

INDEPENDENT REVIEW OF DILLY JAPANESE TISSUE

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

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

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

So far, the Dilly Jap tissue has the highest specific strength of all the tissues and 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!"

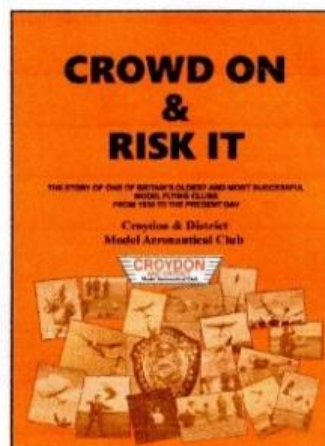
CROWD ON & RISK IT

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 Basingbourn.

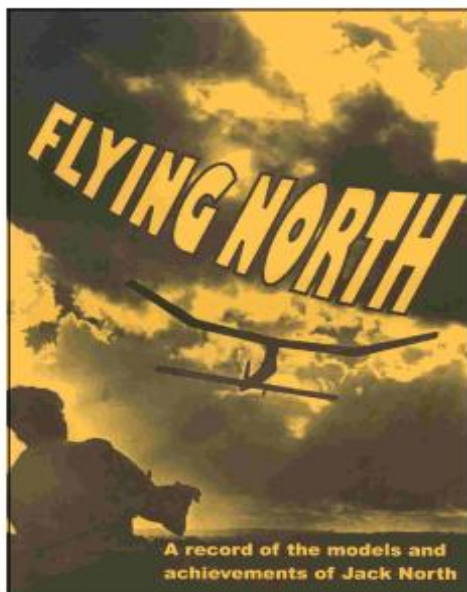
53 designs by Croydon members have been published in the model press and 24 of its members have represented Great Britain in World and European Championship teams. Several have gone on to notable careers in aerospace. Crowd On & Risk It covers all this and more.

Just £8 by PayPal or cheque.

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



THIRD RE-PRINT JUST ARRIVED



FLYING NORTH A goldmine for vintage and nostalgia model flyers -

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

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

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

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

READERS' FEEDBACK

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

"I hope it becomes a classic."

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

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

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

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

"The best aeromodelling book since the Zaic Yearbooks"

Price £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 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).

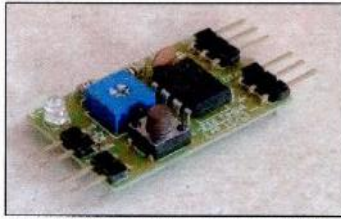
Copies are available from: Martin Dilly,
20, Links Road,
West Wickham,
Kent
BR4 0QW

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

NOW IN FULL COLOUR



E-Zee Timers



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

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

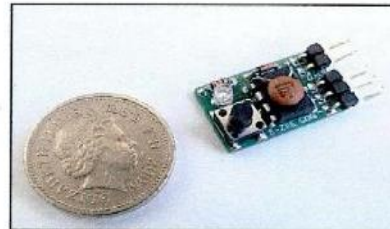
a simple push button / LED interface

- motor run duration:-adjustable 1 to 30 seconds, set in 1 second increments
 - d/t duration:-adjustable 10 seconds to 5 minutes, set in 10 second increments
 - motor power:-adjustable at all times from zero to full throttle (by potentiometer)
 - push button immediately stops the motor at any point during the flight profile
 - duration settings are saved in memory a single button push serves to repeat a flight.
- Length 30mm Width 20mm Height 11mm Weight 5gm

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

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

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



- d/t duration:-adjustable 10 seconds to 5 minutes, set in 10 second increments
 - push button immediately cancels the flight at any time
 - duration settings are saved in memory a single button push serves to repeat a flight.
- Length 22mm Width 13mm Height 11mm Weight 2gm

Timers are supplied with a comprehensive instruction manual and users guide

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

Dens Model Supplies

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



"ONLY TWO MORE DAYS TO THE COMP."

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

For up-to-date details of SAM 35 events refer to SAM SPEAKS or check the website
www.SAM35.org

Useful Websites

SAM 1066	-	www.sam1066.org
Flitehook, John Hook	-	www.flitehook.net
Mike Woodhouse	-	www.freeflightsupplies.co.uk
BMFA	-	www.bmfa.org
BMFA Southern Area	-	www.southern.bmfa.uk
SAM 35	-	www.sam35.org
National Free Flight Society (USA)	-	www.freeflight.org
Ray Alban	-	www.vintagemodelairplane.com
Belair Kits	-	www.belairkits.com
Wessex Aeromodellers	-	www.wessexaml.co.uk
US SAM website	-	www.antiquemodeler.org
Peterborough MFC	-	www.peterboroughmfc.org
Outerzone -free plans	-	www.outerzone.co.uk
Vintage Radio Control	-	www.norcim-rc.club
Model Flying New Zealand	-	www.modelflyingnz.org
Raynes Park MAC	-	www.raynesparkmac.c1.biz
Sweden, Patrik Gertsson	-	www.modellvänner.se
Magazine downloads	-	www.rclibrary.co.uk
Aerofred Plans	-	www.aerofred.com
control/left click to go to sites		

Are You Getting Yours? - Membership Secretary

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

P.S.

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

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

Your editor
John Andrews