

Sticks and Tissue No 40 – March 2010

I'd like to thank all the contributors, without whom this newsletter would not be possible.

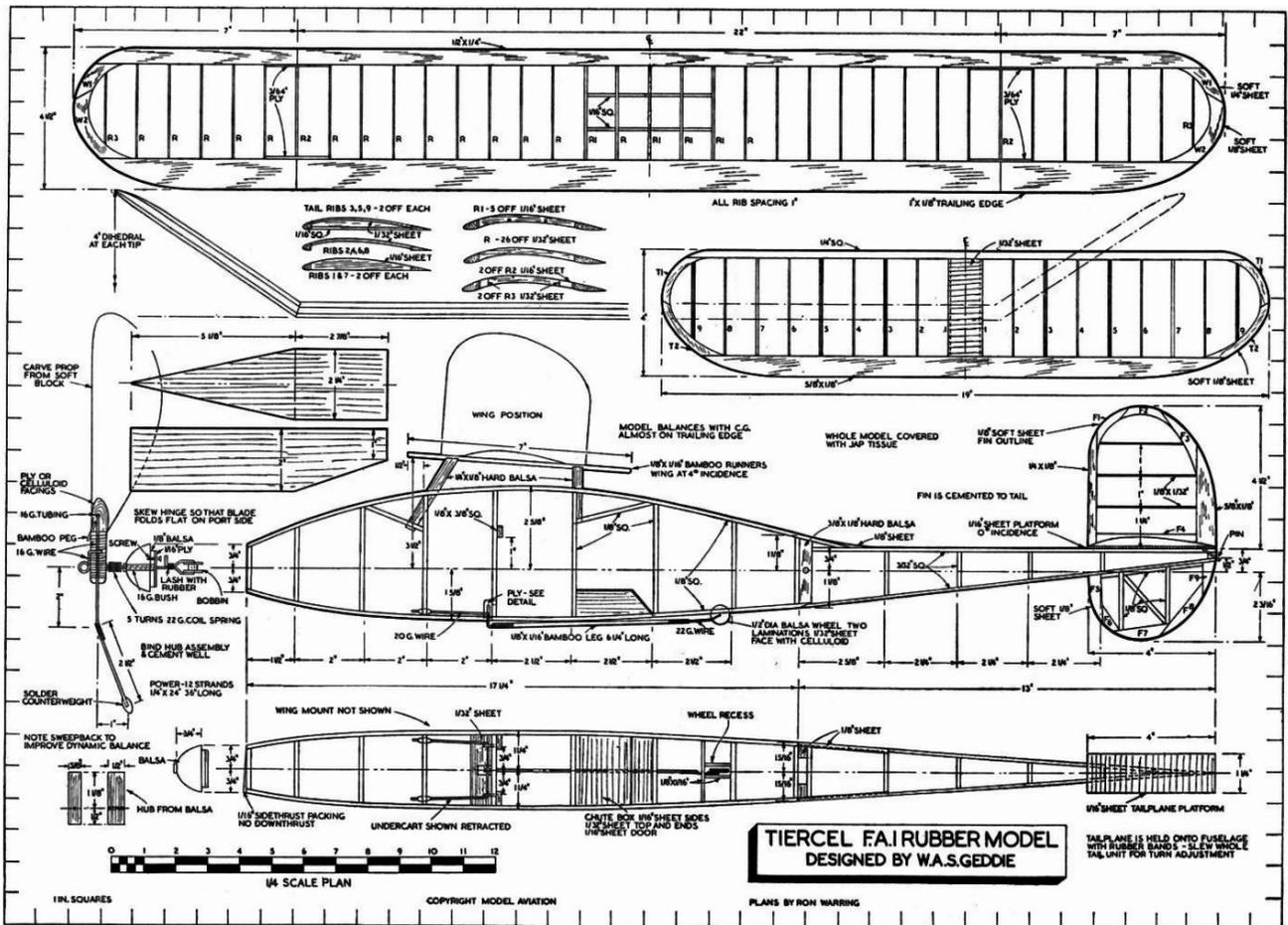
If you can contribute any articles, wish to make your point of view known etc please send to or phone 01202 625825 JamesIParry@talktalk.net

Thanks to Mark Venter back issues are available for download from <http://www.cmac.net.nz/>

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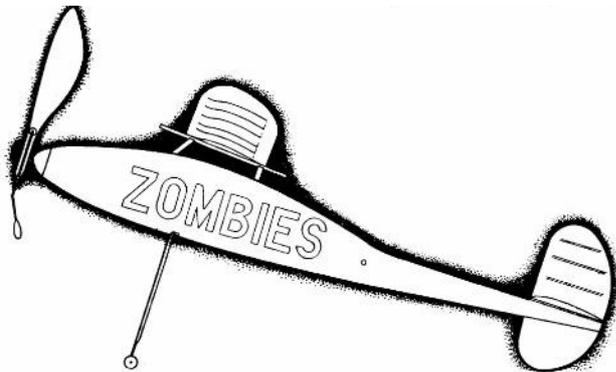


Peter Michel at Epsom Downs – small write up towards end on page 33



Tiercel by W A S Geddie

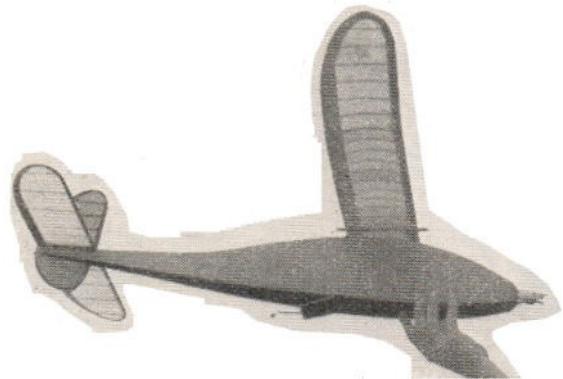
Retracting undercarriage rubber design to FAI specifications. From Model Aeronautics C1948.



TIERCEL is an F.A.I. contest rubber model—with a difference. It is purely and simply a functional design, incorporating such "ultra-lightweight" features as high parasol wing and long fuselage with rear rubber peg well forward, large single-bladed propeller and Marquardt wing section. Yet the lines of the whole model have a definite appeal, the peculiar hump-

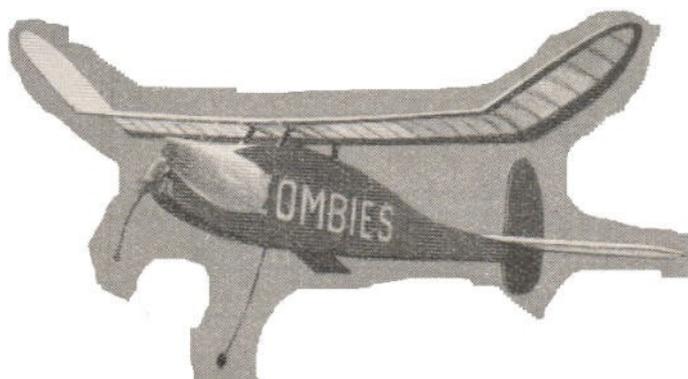
backed fuselage being particularly pleasing in appearance.

Tiercel is also probably the most flown-away model. The original model built in early 1945 is still airworthy, despite the fact that it has made many hundreds of flights and has been entered in dozens of contests. In all it has been lost on -fly-ways no less than fourteen times—returned on each occasion to continue its hard-worked life. Possibly the best example of its sturdy construction is given by the fact that on one occasion it spent four months in a potato field before being discovered. It was then still in a fit condition to be flown in a contest again



a few days later with no repairs or replacements other than the rubber motor. And, of course, it flew away again in that contest! Tiercel also has the unique record of having flown in three consecutive Gamage Cup events-1945-6-7—and flying away in each. A dethermaliser is now fitted as standard—and complete fly-aways are now less frequent!

A second version of Tiercel, with a smaller area wing and tailplane, won the 1945 Flight Cup—this



model being lost completely on its last flight. The original Tiercel won the Brentford and Chiswick open rubber event the same year, and also put up the best flight of the day, and also placed fourth in the Model Engineer Cup. It has been placing high in S.M.A.E. rubber competitions ever since.

Bill Geddie's Tiercel has also been one of the mainstays of the Zombies London Cup teams, forming the "rubber" part of their

strongest team alongside Ron Warring's Wakefields. This team reached the semi-finals in 1946 and the finals in 1947.

Although the lines—and one or two of the gadgets—are unconventional, construction is fairly orthodox. The fuselage is built as a normal slabsider, with two side frames joined by horizontal spacers. The longerons and spacers aft of the rear rubber position are of light 3/32" square stock, which is scarf jointed to the main longerons and care must be taken to line these up accurately when laying down the two sides. Apart from this the remainder of the fuselage structure is quite straightforward. It is advisable to use card templates or similar jiggling—in assembling the sides, to ensure accurate line up.

The retractable undercarriage is a novel feature which has proved thoroughly practicable. This is well detailed on the drawings. With the undercarriage "down" and bearing the weight of the model, the upper extensions of the wire pivot are locked by the strip of 3/8in. x 1/8-in. balsa cemented across the fuselage. As soon as the model is airborne and the weight is removed from the undercarriage, the whole unit drops down roughly 1/4in. in the slots, when the wire arms come free of the stops and the counterweights fall forward to retract the leg. The leg folds up flat against the underside of the fuselage with the wheel partly inside a small slot in the fuselage.

At a later stage a two-wheel undercarriage was used. The same single leg was employed, with simply a Y-shaped wire extension bound to the lower end, each leg of the wire carrying a small diameter wheel. Track was such that, with undercarriage retracted, each wheel rested alongside the side of the fuselage. This twin-wheel undercarriage gave slightly better ground stability for take-off in poor conditions.

The propeller is unusual in having both large pitch and large blade area. The maximum width of the blade is 3 1/8 inches. Powered by twelve strands of 1/4in. by 1/24in. rubber, maximum power run is roughly 65 seconds, the model climbing virtually to the last turn. The propeller assembly employs a normal type coil spring between the propeller and noseblock to stop the shaft when power has run out and allow the blade to fold flat against the port side of the fuselage. The hinge is slightly skewed to make the blade lie absolutely flat and reduce head resistance to a minimum. Folding propellers which do not fold absolutely flat against the sides of the fuselage have a tendency to affect directional stability in gliding flight.

Sparless wing construction fits in very well with the Marquardt section used, fairly light wood being employed for the leading and trailing edge spars in order to reduce weight. All ribs are cut from quarter-grained 1/32in. sheet, with the exception of the centre section ribs, which are of 1/16in. sheet. The centre section is double covered with Jap tissue for additional strength.

Sparless construction is also used for the tailplane, with a minimum of full ribs and closely spaced top and skeleton ribs to preserve the aerofoil shape and at the same time give the lightest structure

possible. The fin is also quite orthodox and pegs into, or cements directly on to, the tailplane. For turn adjustment the whole tail unit is slewed slightly. For further non-critical turn adjustment the wing can also be slewed slightly, although this should not be necessary.

Tiercel balances just in front of the trailing edge of the wing when, with the rigging angles shown, it has a glide comparable with that of any contest glider or sailplane. Under power it is best flown fairly straight, the slow revving propeller and lifting tailplane preventing stalling. No down-thrust at all should be necessary, the model having an extremely good stall recovery. A generous amount of side-thrust can be used to give a wide right hand turn under power. No spiral instability troubles have shown up.

Turn adjustment on the climb is, of course, obtained with a combination of sidethrust and rudder offset. To obtain rudder offset the whole tail unit is slewed, but this should be held to a minimum. A near straight glide is as good as any. In thermals, a circle will then develop naturally.

The retractable undercarriage should give no trouble, once adjusted correctly. Twin wheels are recommended for rise-off-ground work, these being accommodated on a simple V axle bound to the end of the bamboo leg. The undercarriage is gravity operated once the model has risen sufficiently for the unit to drop down in the carrying slots in the fuselage. One peculiarity is that should the model assume a near vertical attitude in flight, the undercarriage will come down again, retracting once more, of course, as soon as level flight is resumed.

A parachute-type dethermaliser is now standard, operated by the conventional fuse. The 'chute is purely circular and 10 inches in diameter. Eight shroud lines of cotton are used, spaced equally around the circumference, and these lines are tied in two bunches of four before being finally brought together and tied. This eliminated the need of a spacer and makes untangling the shroud lines easier. Parachute material is thin silk.

We rate this model extremely high, both as regards design features and consistent performance. Although the original design is now some four years old we feel that this model is still an excellent contest design and, with the increasing-emphasis on F.A.I. specifications, have no hesitation in recommending Tiercel to readers as embracing the best features of the high parasol, folding propeller rubber model.

THE EDITORS.



The Grayson Gnome

This month's « interesting engine » is another photo from Tim Wescott, this time showing the Grayson Gnome. This is another engine obtained from the estate of the late Alwyn Greenhalgh and so, again, it appears more than likely that it may have been used and flown by Claude Bowden.

This looks like an original « factory built » Grayson Gnome, made by E. Gray & Son, in Clerkenwell Road, London, in the mid-thirties (from 1933, I think), which must make it one of the very earliest model aircraft engines to be commercially produced in the UK, although it was preceded by the

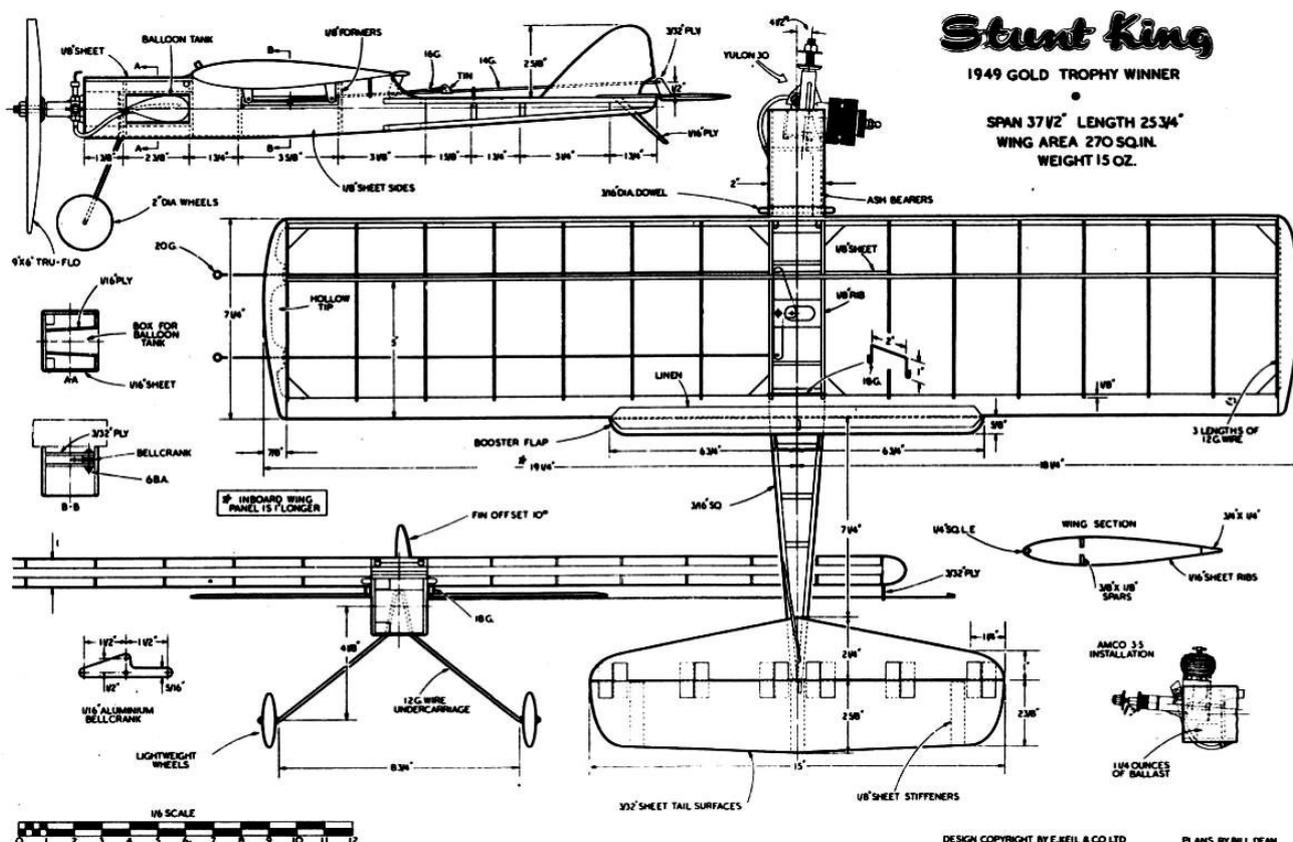
famous 15 cm³ Grayspec, by the same manufacturer. At the time, it must have been one of the smallest engines available, at 3.5 cm³ it must have seemed really tiny.

Curiously, the Grayson Gnome has been just a « rare engine » for decades, but recently several seem to have surfaced... perhaps we should now be calling it the common or Garden Gnome (Sorry!). Ken Croft made one that was pictured in S&T N° 28, and Dick Roberts is currently examining one, with the objective of writing up its general running characteristics in SAM 35 Speaks (so if you want to know how a Grayson Gnome runs, join SAM 35!).

There can't be many people around today who have experience of actually flying a Grayson Gnome so, while eagerly awaiting the results of Dick's « informed playing around » in the Speaks, I can't add much to the above general remarks, except perhaps to make the obvious comment that « when mounting the engine, care should be taken to ensure that the rear mounting bolt is tightened to a torque value greater than that delivered by the engine ! ».



National Stunt Winner by Brian Hewitt From Model Aviation 1950





This purely functional design has been developed especially for the Yulon 30, one of the hottest motors for stunt flying yet produced. The original model—which won the Gold Trophy at the '49 Nationals—was built in November, 1948, and at the time of writing is still in good flying order. The construction has been kept ultra simple for easy maintenance and to enable minor repairs to be made easily and quickly on the field.

For transport convenience, the wing is detachable, and this feature has also proved a great help in limiting damage in crashes. The wing could be fixed, but the above advantages make the detachable type really worth while. On the original model the UP elevator movement is 80 degrees and the down movement 45 degrees. Full elevator movement is seldom called for, but maximum UP (combined with DOWN flap) can be very helpful when the model is approaching the ground vertically and there's only a few feet to go. The flap is definitely worth the extra installation trouble and is not used on this design just to be "different." Actually the effect of the flap is small in normal fast manoeuvres, but at slow flying speed, the increase in

control is very noticeable.

A more streamlined version of this design has recently been built, but apart from a slight increase in the speed, no improvement in performance has been noted. The Yulon is again back in the original and the cleaned up job is flying with a Glo-Torp 32. Sixty-five to seventy foot lines are needed with this heavier, more powerful model—in order to keep the square loops looking square. If you are content with 55-60 m.p.h. an ideal speed for all-weather stunting in my opinion—there is no need to clean up the nose, unless you want to make the model look prettier. I realise that many modellers first of all go for the appearance of a design, but if you want a model that will do everything possible on two lines, this is it. There are plenty of realistic commercial designs that will do the "book" but what a struggle it is to fly (and repair) them. Why is it that the majority of the top stunt men still go in for functional designs of the Stunt King and Boxcar type? Could it be that the simple type of stunt model is still unsurpassed for sheer easy-to-handle contest performance? The majority of contests held in Britain since controlining first got under way in 1947, have been won by "barn-doors"—including last year's Nationals by Pete Cock's "Kan-doo." This isn't meant to be an attack on the good-looking type of controliner—they look grand in the air—but in a stunt contest only performance counts. If they ever start handing out points for appearance, then that's another matter altogether.

But to return to the Stunt King—line tension on this design is taken care of by using a 1 in. larger span on the inboard wing panel; offsetting the motor and rudder; weighting the outboard wing tip—and keeping the C.G. well forward (1/2-in.- 1 1/2-in. behind the leading edge of the wing). Flying this model is easy and even a new-comer to the hobby should get on O.K. Inverted flight is particularly stable. I find that the best way to learn to fly inverted, is to use nothing but DOWN control in this attitude during the early stages. I prefer my own models to fly at a slight nose-down angle when inverted, so that a little DOWN control is needed all the time. This supplies a gentle reminder that control movements are reversed. Always use all the power that your engine will deliver you can only have too little for safety, never too much.

Other rotary valve glo-plug motors of similar capacity to the Yulon 30 (or 3.5 diesels) should give almost equal stunt performance. If a heavier motor is used, the manoeuvres will not be so tight, but as long as the power is there, you will be able to fly on longer lines. The Amco 3.5 should be good in a fairly light version, but keep the tail unit light and add ballast (if necessary) to keep the C.G. forward. The Elfin 2.49 would probably give a full stunt performance in fairly calm conditions. Motors of the Mills 2.4 or ETA 29 type will necessitate considerable re-work on the fuselage front.

Regards the ETA 29, although this is a fine motor for speed flying, I haven't yet seen one go through consecutive vertical eights without murmuring its objections. It is, of course, a racing motor.

I am surprised that Jim Walker's method of using a balloon for the fuel tank has not been adopted generally in this country. I tried this type after experiencing trouble with the conventional metal kind. Since then, I have always used balloon tanks on glo-plug engines as they provide the nearest thing to a perfect feed that I have yet encountered. Cut half the neck off the balloon and attach it lightly with a rubber band to a length of fuel tubing after making notches in the tubing 1/16-in. from the feed end to prevent the balloon adhering to the tubing and stopping the flow. On glo-plug fuel, balloons last indefinitely. With diesel fuel, however, a replacement will have to be made after every one or two flying sessions.

An advantage of these tanks is that spare balloons can be filled prior to competition flights, quickly changed, and you can be away for another flight in no time at all. The only thing to remember is to squeeze all the air out of the balloon as you are filling it. Eliminate the air and forget about such troubles as fuel surge, frothing or bubbling. Become familiar with starting and running the engine before taking the model out to fly. Nothing un-nerves a stunt flyer more than not being sure of the power-plant. Flying a model is enough to think about without other unnecessary complications.

Sixty to sixty-five foot lines are standard for this design, depending on weather (0096 four strand) -although 55 foot (.017) ones were used on the Nationals' winning flight. For economy reasons I frequently use 9 in. x 7 in. hand-carved airscrews. The most suitable commercial airscrew for the model is the 9 in. x 6 in. or 10 in. X 6 in. Tru-flo. The fuel used at the Nationals was 25 per cent: Nitro Methane, 50 per cent. Methanol and 25 per cent. Castor Oil. "Record Powerplus " fuel is also recommended. But for all flying other than the most important competitions, I have always used a plain (3/1) Methanol /Castor Oil mixture—with a 2 per cent Amyl Acetate additive.

So far, nothing has been said about the actual construction of the model. This is quite straightforward and only the fuselage is a little unusual, being a built-up box structure with sheet side, formers and a 3/16-in. square tail framework. The sides are cut, pinned to the plan and the 3/16-in. square added at the tail end. These sides are joined in the usual way with formers and cross braces. The other components are conventional and their construction is clearly shown on the 1/6 scale drawing at the beginning of this article - together with main specifications of the design.

ABOUT THE DESIGNER

Brian Hewitt is 27 years old and a member of the South Birmingham M.F.C. He served in the R.A.F. for five years and flew models in such far away places as Shanghai and Hong Kong. At present is employed as a bank clerk. His first powered model was built thirteen years ago. Until early 1948 he was interested in all types of models, but since then has concentrated almost entirely on stunt. Basic stunt training was carried out on a couple of Ohlsson 60 and Mills Mk. 1 powered originals. These were followed by an Atwood powered Great Lakes Trainer, built from an American kit. In spite of its weighing 60 ounces, this model performed everything except vertical eights.

Brian's next model was a modified Hot Rock, fitted with a McCoy 36. This gave good service until November, 1948, when he managed to secure one of the first Yulon's and the plans of the now famous Stunt King were started. This stunt design has subsequently been used for all his contest flying. He was married just after his Nationals success and, we regret to say, has only once placed first in a stunt contest since. So, take warning dear brother, take warning dear friend...!

Memories of ‘Pete’ Fisher, by Stephen Winkworth

Many references have recently been made in S&T to the iconic, eccentric model aircraft designer, ‘Peter’ Fisher. He played a minor but memorable part in my life in my early teens, and I still have some fairly sharp impressions of him that I should like to share with other readers.

I met Fisher in the early 1950’s on Epsom Downs. Model aeroplanes had become my passion at that time (I was 12), and my grandmother’s house at Walton-on-the-Hill lay a short car drive from the Downs. I would be despatched there by her chauffeur, Mr Dearmer, and left in glorious liberty for a whole afternoon to fly my ED Bee-powered Veron Sky Skooter.

Fisher, when I first met him, was flying one of his large free-flight push-pull flying wings, similar to the Ionosphere 21 Tony Tomlin has recently been building. It was no doubt an earlier model, since I am fairly sure it had pylon-mounted engines. I immediately invited him back to tea with Granny. There was barely room for the wing in his Lea-Francis sports car, so he followed Dearmer and me in the Vauxhall. Granny’s house, Lovelands, was quite an impressive place, approached via rhododendron-flanked twin drives to the main and staff entrances. Grandfather was a well-known collector of antiques, as well as an all-round sportsman. He built the house within reach of the horse racing at Epsom, and a short walk from the new golf course at Walton-on-the-Hill. Lovelands has since been pulled down – grandfather had not foreseen a world without servants, nor did he believe in central heating.

However, none of this suburban opulence particularly impressed my new friend, in fact he took it all pretty much for granted. But I do remember there was some embarrassment when he was asked his name (he would have been about eighteen or nineteen at the time) and he had to confess that it was an unusual one ‘Ocean, actually’. This was before he had started to call himself ‘Peter’, and I had not yet heard of his elder and younger brothers, Mountain and Forest. Their mother, he later told me, had been ‘an explorer, and had called her boys after the things she loved’. I think Forest, who I later met as a fellow schoolboy at Winchester College, was the least damaged by her flamboyantly bizarre choice of names. There are Americans called Forrest (usually spelled with two ‘r’s), and in fact I gather he now lives in that country.

We exchanged addresses and I visited Ocean in the Fisher residence at No 19 Princes Gate – a huge place even by comparison with my parents’ sizeable house in Little Venice. The building later acquired notoriety when it became the Iranian Embassy, site of the famous siege. Ocean and Forest had a large model building room to themselves on an upper storey. The garden was just large enough to fly control-line models, though the practise was discouraged as it upset the neighbours. Other models were flown in Hyde Park’s Rotten Row, just over the road, and another S&T correspondent has mentioned that gliders were even launched from the upper windows to soar across Kensington Gore and land in the park.

Ocean made frequent trips to other flying sites and he would sometimes take me along in the passenger seat of the Lea-Francis. I remember a trip to Epsom to test a large, and in my judgement hugely heavy radio-controlled biplane. It was an aggressive looking beast with negative stagger and the signature narrow ‘v’ shaped cabin window he always favoured. The hand-launched test glides we used to perform in those days were out of the question owing to its weight. Its DC 350 diesel roared into life and it climbed well, with snappy turning dives – a useful characteristic in the days of single channel – but it proved under-elevated on the glide and crashed. What to me would have been a major setback did not appear to bother him, and he told me it could easily be repaired. He then asked me to think of a name for it.

I was quite flattered by the request and gave a lot of thought to this chance to put my personal stamp on the Fisher oeuvre. Another of his models went under the generic name ‘Apex’. (There were many versions of the Apex, of which more anon.) I came up with ‘Climax’. I was extremely pleased with my choice, which combined the ‘Apex’ theme of supremacy with the idea of maximum climbing ability. When I boasted of this happy triple pun to my mother I remember her face clouded over, but I was unable to discover what it was that she found troubling. Ocean too hesitated a little,

for similar obscure grown-up reasons, before adopting the name, but it was duly used for several of his aircraft (the name was not used for any of the Performance Kit models but there is a mention of it on page 37 of his book *Collector's Guide to Model Aero Engines*).

Not long after this my parents rented the Palladian Villa 'La Malcontenta' on the Brenta Canal, near Venice – a somewhat splendid structure, now open to the public – for a summer holiday, and invited Ocean to join us. I had built an 'Apex' as my first attempt at



Left: Author's mother on lawn of Lovelands



Right: The author, aged 14, holding Apex

radio control, with an ECC 951A single valve receiver, and one of the new ED Hornet 1.46cc diesels for power. I brought this model with me. It differs from the Performance Kit version of the Apex in that it had a single fin: one whose general dimensions had been dictated by Ocean, but whose shape was my own – derived from the fin of a Keil Kraft Pirate and not at all in the Fisher style.

I remember two things about the first evening of Ocean's arrival in the Malcontenta. The first, illustrative of his view of all life as coming under the spell of aero- or hydrodynamics, was his attack on the melon. He found a melon sitting under running water in a fountain in the garden, and became quite aggravated about it. He asked me to tell the maid, who was preparing our supper, that the running water was not going to clean the melon, owing to boundary layer effect. I haltingly relayed this message in my limited Italian, only to be told that she had placed it there not to clean but to cool it.

The second event occurred after supper. Ocean, anxious to make a good impression on my parents, produced a mouth-organ, and offered to play them a tune. 'I can do a pretty fair boogie-woogie, if you'd like that.' With hindsight I am strongly reminded of Wodehouse's Bertie Wooster. A young man with too much money and a veneer of dashing stylishness overlying a personality oddly unfitted to deal with the world on any but his own very limited terms. He used to refer to people as 'Chappies' and there was a smattering of jaunty pre-war slang about his speech.

Anyway, the offer of 'boogie-woogie' was not taken up, and my father asked Ocean if he'd like to borrow a book. My parents were avid readers, and a special, enormously heavy trunk of books had preceded them to Italy by special delivery. For once, Ocean's normally impregnable self-confidence appeared to desert him.

'A book – a *reading* book? I haven't read a *reading* book in years.'

This reply, emphasizing the gulf that lay between our respective world views, achieved iconic status in the Winkworth household, and would be repeated by my mother whenever Ocean's name came up in conversation. In Ocean's defence, I think he had been struggling pretty hard to get through his degree course in aerodynamics at Keble College Oxford, and had had little time for anything but technical literature.



Apex in the gardens of the Villa Malcontenta

It was summer, the weather was hot, and mosquitoes were in such abundance that they darkened the ceilings of the Malcontenta (we sprayed them with DDT in hand-pumped containers). Ocean and I made one or two attempts at flying the Apex on the dry, scrubby fields around the villa, but there were problems with the radio, and things that needed re-soldering, so I don't remember it ever actually flying in Italy.

Ocean would nip in to Venice in the Lea-Francis. He had a theory that there was an ideal speed for traversing the heavily pot-holed unmade roads. Too slowly and you would sink into every hole, but if you hit exactly the right speed the wheels would fly across the holes and the road would magically become smooth.

He had a theory for most things, it seemed to me at the time. I remember coming across him unexpectedly one day in Venice when we were there for a day's sightseeing. No, why waste your time looking at old churches he said, and disappeared down a side street in search of a shop which sold the new Italian 'Super Tigre' engines.

On returning to England, Ocean told me about a tiny engine that was being produced by a Mr



Adams, and sold in a shop in Parkway, Camden Town (the shop that later became RipMax). So I bought my first Adams 'Dragonfly' – was it an 0.1cc or an 0.2cc? – with the hand-carved aluminium propeller.

Ocean designed an aircraft of about 22 inch wingspan for it – another 'Apex' – which I lost not long afterwards when it flew out of sight round 'Hills Valley' near Winchester. I bought another Adams, with a pusher propeller, several years later. My last conversation with Ocean, some time in the 1980's, by phone to his 'castle' on the Isle of Man, was to ask him the current

value of this little gem.

There was an uncompromising individuality about his designs, and a preference for honest functionality rather than fancy curves. But at heart I think he was driven by a need to create what he believed were beautiful machines, and though they may not be pleasing to every eye, his models are instantly recognisable. His love of model engines formed a part of this aesthetic. He used to have long discussions with my father, who collected Japanese swordguards, about the appeal of the contrasting qualities of various metal surfaces.

I have built three more Apexes. The next had two fins and an Allen-Mercury 2.5cc, again on Fisher's recommendation. The A-M 25 came from Henry J. Nicholl's shop in the Holloway Road. The Fisher brothers used to try to get a batch of engines and run them in the back room of the shop so they could choose the best. Many years later I built a standard Performance Kit Apex, and recently I have built a 4/5th scale version, with a clipped wing, for a PAW Vintage Special 0.8cc, which I still fly here in the south of France, to the mystification of the local model club. The undercarriage unplugs, Bowden fashion, and the wing and tail are each held by a single nylon bolt, so it is a simple matter to take it apart and fit it in the box just visible behind the wire fence to the right of the photo

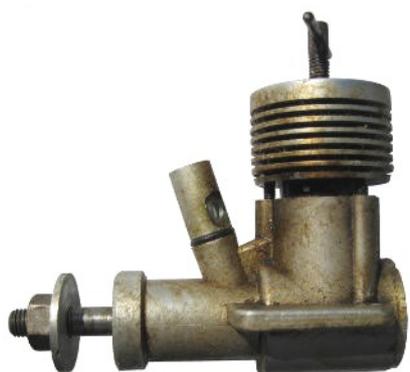


Apex: rear view

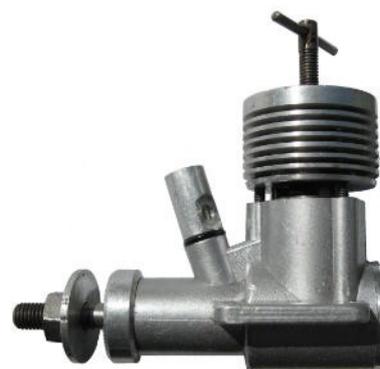


Apex: front: the logo on the right wingtip reads 'Pussycat Kits'. There is a 'Performance Kits' Kitty logo on the fuselage side

Dish the dirt!



After nearly four years I opened up a hastily packed box in which I'd placed some engines, all wrapped up the day before I moved, in order to remind what was there and give them a clean and oil. This undertaking to have happened a long time ago. Still rather late than never. What a disgrace one of the PAW's was. It had been in a



Warlord, the airframe I ditched in the bin, hadn't been used for quite a few years. Decided to try Fairy Power Spray for a clean up, so laid on kitchen paper I sprayed the engine all over. Ran warm water into a bowl and then scrubbed engine with a nail brush. Dried off with kitchen paper and oiled, took second photo. All in space of 6 minutes. I then gave the engine a few minutes running time. The power spray is strong and so you shouldn't use but if you have a go then protect your hands. I have no idea if there will be a long term detrimental effect on the engine so wouldn't recommend use of. Has anyone else used the spray or knows of reasons why not to? JP.

FLYING NORTH – A POSSIBLE RE-PRINT

Some of you may have spotted a secondhand copy of Flying North on E-Bay recently, priced at £30. The first print run of Flying North was perfect bound (i.e. with a squared-off spine like the Zaic Yearbooks), and has now sold out. However, if you missed getting your copy first time around, and if sufficient people express an interest, it should be possible to produce a limited, spiral-bound edition, still for £17, which is a good deal less than a perfect-bound one would cost today.

As a reminder, Flying North traces the model flying career of Jack North, one of only two people to represent the UK in 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.

It 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.

The book has been well received by model flyers worldwide.

"... 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".

If you'd be interested in having your own copy of Flying North please contact Martin Dilly on 020 8777 5533 or e-mail at martindilly@compuserve.com before the end of June

Find That Model by Allen Wale

When a model has landed downwind, either in sight or at some point where it disappeared from sight, it is customary to focus on that point and go off in pursuit. If you are lucky you have one end of a line to the model. But a straight line, the shortest distance between two points, needs two end points. With two points you are able to monitor that you are still correctly following your line.

When flying, I always return to a fixed point to watch the model down. I use a bright coloured model box as my fixed point. When the model has landed or disappeared from view, I always visually mark that spot and pick a prominent spot on the horizon beyond the landing area as my

forward reference point. I do this even if I can see the model on the ground, as it may not always be visible as forward movement covers rolling ground. Now I automatically have two ends of my straight line. This works well enough for a same day recovery, but what if there is not time enough or light enough to follow it up on the same day?

The solution is to find another reference point to the rear of the launch site 180 degrees from the forward reference. To do this, simply point to the forward reference point, turn your body 90 degrees and stretch out both arms forming as straight a line as possible. Select and remember a rear reference point. You now have a very long straight line which is permanent, and can be used any number of times until the model is found.

How well does this work? Here is an example. In 1987 SAM 86 ran a contest as part of the Canadian Nats. A friend flew a rubber job which disappeared over a cornfield. I automatically took up two points for a long straight line. I then left the area and would not be back until the following afternoon. When I returned the group had moved a quarter mile farther down the edge of the airfield runway. I quickly learned that the model had not been recovered and set out to find it. I simply had to walk out roughly perpendicular to my line of the previous day until I was positioned between my two reference points. Then I moved forward focusing on my forward reference point. The going got tough when I entered the corn which was 7 or 8 feet high. Keeping to my line as closely as possible I came upon the model 15 feet to my left about 20 rows inside the far side of the cornfield. About 15 minutes after setting out I was placing the model back in my friends hands. The corn had slowed me down!

Whenever I have stuck to this procedure I have never lost a model over the last 40 years. If you try it and find it useful, I would be happy to hear of your experiences. You may contact me at; awale@sympatico.ca .

David Kinsella's column

A Magazine Remembered

Students of MAP's publications enjoyed the pictures by staffer Laurie Bagley. And here's Laurie's SE5a of 74 Squadron low over the snows of France in 1917, this to fire up the 17 page section on Folland's famous Great War fighter favoured by the best. Hasegawa had launched their eighth scale kit (£169) and editor Ray Rimmel had built one, he in 1983 about to move on after 14 years with MAP. Scribes Gray, Jones and Rupert Moore had supported the magazine, first edited by Ron Moulton and founded in 1969. Hasegawa's big stuff included the Fokker Triplane (£150) and the 1198 parts Camel (£199). To date only the Triplane has reappeared (£450) but SAM enthusiast Noel Barker's SE may be seen in a glass case at Brooklands.



Motto Followed

In the boom years of aeromodelling there was hardly a shopping area without a gent's outfitters selling everything from socks and shirts to suits and hats. Hector Powe's window in Manchester was crucial to the rise of an ex Mosquito fitter in the world of showbiz, for it was at that window that a man was filmed waving his arm and leg (mirrored, of course, so that both feet appeared off the ground at the same time). The mines of Yorkshire behind him and boosted by the RAF, our comic went on to perform on radio and television and the West End stage. Presenting his wife with a pedal bin, days passed before a gold watch, earrings and bracelet were found in the bottom! Mag checks and firing orders remembered, Harry Worth died in 1989.

Incredible Fry

Said to be the most gifted Brit of any age, he was fluent in Latin and Greek, batted in 26 Tests (top score 144), played in the Cup Final, shared the World Long Jump record (231/2 feet), taught, wrote, edited magazines, advised India at the League of Nations, ran training ship Mercury, spoke on radio and TV, stood for Parliament 3 times, met Hitler, was considered for the Albanian throne, was an Oxford triple blue (just failing at rugby) and was known as Charles III. In First-class cricket his best innings took 258 runs. Even in his 70s he could jump backwards on to a mantelpiece! Against Australia at Trent Bridge in 1899, he was alongside W G Grace, Wilf Rhodes and the incredible Prince Ranji. Hollywood beckoned, but before, the airliner California was an age away. Fry's magazine The Captain published Christmas annuals and I discovered two at a Wimbledon fair. Charles Burgess Fry, pictured, was like no other.



Fine Freebies

Back west in Buckingham Palace Road, our Telegraph issued a run of great movies starring several who had worn uniform in anger and knew what it was really all about (and it shows). Todd, More and Niven, for example, looked the part because they had been officers on active service. Here's David Niven, wings and gongs up, opposite Leslie Howard. I'll save blushes, but last year I saw a sad effort, 'military types' of dubious quality as if press ganged from the local barn hall rep! Button undone fighter boys had a tanner sewn inside their wings to make them stand out. All part of looking the cat's whiskers. And Bader, Johnson, Stanford Tuck, Duke and their band of brothers certainly were.

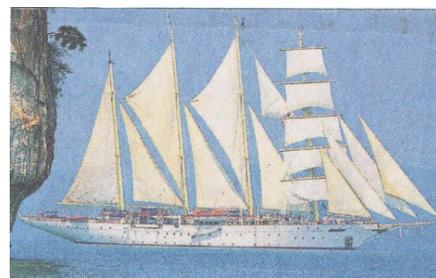


The Unexpected

Recovered from a Swiss lake after 70 years on the bottom, a 1925 Bugatti was sold for £227,000 against an estimate of £80,000. It will form a key exhibit in the world's largest private collection of these cars. Elsewhere another Bugatti carries the identical chassis number! It went into Lake Maggiore to avoid import duty, but its return to the land of the living raises interesting questions which may never be answered...

Brace Up!

I've yet to do a serious trip under sail. Straining canvas is still around, as here, but not like it used to be in the days of The Last Grain Race (a great read, again if you can find it). Before grain and wool from Australia tea from China was raced back under a dangerous spread of sail, famous ships like Cutty Sark, Taeping and Aerial arriving within hours of each other. Sometimes arranged by farmers, a few pigs and other animals would be brought over for breeding purposes.



All The Answers

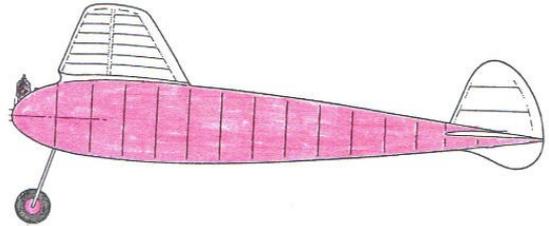
We're happy with Holmes, Barton and Morse, but how about the, 400 or more that make up the A to Z of British detectives? And then there's all those villains: Moriarty, barber Todd and pirate Silver and hundreds more. Now in two volumes Russell James provides all the answers along with heaps of illustrations. Good stuff from Pen & Sword at £20 each and essential for your crime fiction shelf.

Air Tattoo Extra

In July RAF Fairford, Gloucester, will celebrate the 70th anniversary of the Battle of Britain. Not to be missed, several classic aeroplanes from Germany and Italy will join in for the first time. In support at Fairford -the biggest annual celebration of military aircraft in the world - will be famous names from the dozen or more countries involved in the war. Gearing up for the big weekend will take time and so a peep with the camera a day or two before may well be a good idea.

Bold Oldie

Brown Junior powered, of 6ft span and reported in Flying Aces in September 1939, Gil Shurman's Rambler recorded amazing flights straight off the building bench. Long flights meant that Dad's Terraplane, stylish with running boards to stand on, came in handy when chasing around Long Island in search of the beast. By the Seversky Aircraft works and various gardens of rest around Farmingdale they'd go, sometimes with fellow flyer and old plane designer Paul Plecan.. Face it, men, these great Yank gassers were Great - and still are! A while ago now, Jack Humphreys and his magnificent 10ft Carl Goldberg Valkyrie at Old Warden was a staggering sight. In a cap and towing it behind him like Eddie Keil used to do at Fairlop, Jack told me that there was another Valkyrie at home! Super light at less than 5lbs, its elliptical wings had an area of 13sq ft. I believe the original model, after some 53 minutes in sight, crossed a nearby river and vanished into Canada. Giving chase in a birchbark canoe was not an option.



McGudden's Mount

And here under construction is Hasegawa's 40in SE5a. Big enough to pile on the detail, the cockpit alone lets the builder go to town for as long as he likes. Info is vital and there's lots of it in booklet form, especially from Windsock and Scale Models International. There's a history of 56 Squadron (Osprey), another on SE5a aces (Osprey), the very first Profile (2/- in 1966) and even a special from Poland (88 pages in 2005). Several outfits such as Austin and Whitehead built the SE during the war and so detail and quality varied, as was the case with the similar SPAD. Chaps who knew a thing or two tried to collar a 'SPAD SPAD Hispano Hispano', in other words built at the SPAD works and powered by a V8 from the Hispano factory. During the subsequent conflict Ford built Merlins cheaper than Rolls-Royce and Packard's Merlins were really beautiful. To boost your labours on the SE5a, Flying Fury by Major James Thomas Byford McCudden VC DSO MM CdG will swing your prop.



Old Imperial

Opposite the coach station in Buckingham Palace Road stands the impressive pile that was once the London headquarters of Imperial Airways. The Imperial Airways Gazette printed by Gee & Co (Publishers) Ltd referred to it as Airways Terminus, London, and above the main entrance was a symbolic group by E R Broadbent. A monthly publication, the Gazette was sent free of charge to interested parties, school children having to apply via their schoolmaster. Victoria station, just north, ran luxury Pullmans to the Empire flying boats waiting at Southampton. The GWR, with running rights into this Southern station, could take advantage of the service. A branch of the main England-India-Australia route, flights to Hong Kong began in 1936. In the first 6 months



of the Air Mail Scheme the airport in Hong Kong handled 65 tons of letters (posted by us in bright blue boxes).

Trusty Tornado

Trains held up by ice and snow, a shivering multitude was astonished to see a Cathedrals Express special arrive headed by brand new A1 Tornado! With room on board, just, the 3-cylinder 4-6-2 express pulled away in style to the sounds of popping corks, cheering and good old steam power. Paper hats went round as Tornado stormed through the snows of Kent. Showed 'em!

Changing Spots

Big beast of the serious circuit, 100ft Icap Leopard came third in the 723 mile Sydney-Hobart. Crewed by 24, owned by Mike Slade and sponsored by the City's Michael Spencer, £7 million Icap Leopard will be fitted out for charter. cruising. A groaning shelf of silver proof of her greatness, a grain or two of luck helps when choosing tacks. Mike hoisted the Rolex Fastnet and Middle Sea events in 2009, but at the end of the year New Zealand's 100ft Alfa Romeo scored her 144th win since launching in 2005



Bike Aboard

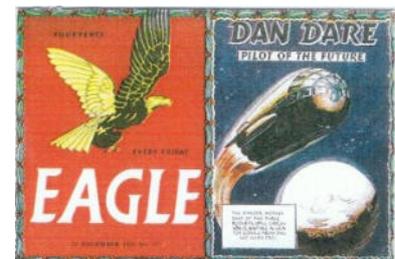
Owning the first racing Bugatti in England, winning the Le Mans 24 hours with Woolf Barnato in a Speed Six Bentley, setting a record to Cape Town in his Lockheed Vega kept at Croydon, George Pearson Glen Kidston explored in Africa and squired famous beauties of the day. Commanding a Royal Navy submarine on the China Station. (Empire days, remember) he carried his hot Sunbeam motorcycle aboard ready for hill climbs and speed trials along the sands of Hong Kong. In HMS Orion during Jutland, shells flew around him as he gave orders. But a storm claimed the wings of a borrowed Puss Moth and a propellor set in stone marks the spat in the Drakensberg mountains. Boy Scouts mounted a guard of honour at his funeral on the Welsh borders where a stone reads 'time and tide wait for no man'. I knew his son.

Our Special Agent

Out of the blue in January came Dick Barton in cracking form. The Devil's Gallop lead the way, urgent warnings, socks to the jaw and pistol shots as good as ever. These days Sticks & Tissue is read everywhere. Well done Radio 4.

Nothing Like It

And here's mighty Eagle at Christmas 1950. Artist Frank Hampson gives us the mother ship Ranger as he circles Venus, waiting for a signal from Dan Dare and his team. A smash hit from the launch in April, the colour and spread of Eagle put it miles ahead of the pack. Selling over a million a week in austerity Britain, reader benefits abounded: free bikes, warship visits, carols at St Paul's, free entry to cricket matches to see stars like Compton and Trueman. Read and enjoyed around the world - the fan mail was massive - editor Marcus Morris and his team of twenty got it right. Good copies are rather expensive these days, but a number of books have appeared over the years confirming its excellence. When Dare goes missing on Venus the front page of the Daily World Post appears in newspaper form, Hampson's dad in uniform posing as Sir Hubert Guest, head of the International Space Fleet. Yet another first for Eagle.



London Lines

Reminders of the old railways that fed London. long before the big groups were formed in 1923/24 can still be found. On the southern end of Blackfriars Bridge, close to the Express building of the 1990's, stands a richly decorated reminder of the London Chatham & Dover Railway 1864. Below four crests - Kent's white horse, etc - is the word Invicta in block capitals. The track across the Thames went long ago, but the massive dull red posts that carried it are still there. Like the RFC pilot flying in his Irish Guards tunic, years passed before engines and carriages were painted into the new system.

Oz Beauty

7ft and fantastic in the grass-bleaching sun of Australia, here's Mark Nelson's 1937 OS 60-powered Scram. New York's Ray Heit designed her, the original stolen because of her beauty and quality of construction. In the good old days Flying Aces was in West 44th Street (just over from friends in publishing in 46th years later) and Ray's plan was published by the magazine in July 1938. Another great American gasser.



Harts, Hinds & Furys

Flying models on Wimbledon Common and building a few more for the boys at Eton College, some hauled up to their rooms by rope, Sydney Camm designed several greats of the silver biplane era, the Hurricane, the jet Hunter and much of the Harrier. As Sir Sydney Camm, chief designer and a director at Hawker Aircraft north of Kingston, he lived in a large house in Sugden Road, Thames Ditton, later moving to Windsor. Now a fund has been launched to erect an impressive monument in the shape of a Hurricane - our main Battle of Britain defence - and establish a scholarship in his name. Not fond of flying, a trip to the USA was done by boat.

Watt!

This year the Royal Society celebrates its 350th birthday, founded to encourage science. Hooke, Newton and Wren were members, a remarkable example of their times being the Monument (in the City - also a 200ft tall telescope to observe the stars). In the basement is a little room with a fireplace - and, of course, a hole in the roof to look up). Later and elsewhere others were pressing on with steam power and mass production. It can be argued that Watt gave more to science than science gave Watt.

Public School

Open to all and fees free until a purchase is made, the Old School Model Aeroplane Co (020 8647 1 033) offers a good range of laser cut kits which fit together magnificently (remember the old days and hairy balsa?). Derek Foxwell is at the helm and short and full kits will produce beautiful Zoot Suits, Vic's Coquette and several RC and C/L models and, of course, lots more FF models. If you worship at the altar of Precision, it's the best school for you.

UNCLE

Not the old boy who used to slip us a fiver when he called, but UNCLE from small screen days when the Bond explosion caused all manner of secret agents to spring from the typewriter and strap on their Walthers. Remember Flint, Mark Sabre, The Avengers, Modesty Blaise? UNCLE, starring Robert Vaughan and David McCullum, concerned itself with serious crime, even international stuff. And there was an HQ somewhere that issued cards confirming membership. Signed by Norman Felton (Policy & Operations) and Sam Rolfe (Operations & Enforcement) I'm No 1507 (Propaganda

& Finance). The yellow ID Card warns that I'm down for Y3K7 Hazardous Duty at 12 hours notice. Best get ready...

Classical RAF

A distinguished Dartmouth boy, Nigel Tangye served in the Royal Navy from 1923 to 1931. He wrote for the Evening News and advised Korda's London Film Productions. He flew as an Air Taxis pilot, was a London Aeroplane Club instructor and worked for the AA. He flew twice at Hendon during the great RAF Pageants and in 1938 published Teach Yourself to Fly. As the Royal Air Force was expanding rapidly with 24 new stations opened within 3 years (Debden, Odiham and Scampton for example) Nigel was asked by Air Ministry to train their pilots. Soon a wartime edition of his book appeared and it was a lifeline for hundreds with just a few hours solo. Of 170 pages and with simple diagrams to help the tyro, Squadron Leader Tangye's book is still in print today.



Input From SW20

A name in the USA, Raynes Park's sax player Tubby Hayes formed the Jazz Couriers with Ronnie Scott. Off the liners and in New York, sax player Scott sat in at the Three Duces and other clubs in 52nd Street. Vital to the founding of Ronnie Scott's club, first in Gerrard Street and then Frith Street, was Pete King (ex Jack Parnell's big band) who ran things until retirement in 2005. Wants on both sides meant that union restrictions waned and the US got the Beatles and Pop and our Scott's staged the giants: Parker, Getz, Rollins, Shavers, Gillespie. Rimshots and bombs assailed passers by as Buddy Rich moved up a gear. Others such as Webster, Kirk, Peterson and Evans followed. I last spoke to Pete King in his BRDC badged Porsche some time in 2003. On a visit, Charlie Shavers was tickled to see on a bathroom wall in his hotel a plug socket marked 'shavers only'. Rollins, locked in one night at his request, emerged from Scott's the next morning with the score for Alfie (Michael Cane, 1966).

26in Prop

If you're into really big stuff, pray consider his giant from MVVS. It's a mighty 58cc and pumps out anything from 7 to 8.5bhp. Perfect for big scale models - Boeing Stearman, Bristol Fighter, DH9a, SE5a - Puffin's of Bristol (01454 228184) will supply. I have a nice MVVS 29 Speed (rear inlet and exhaust) but know little about the firm.



Wonderful Wembley

A full nine days of the MEE was how it used to be. With late closing on Thursday (9pm) it meant a staggering 83 hours of pure heaven: movies every day (John Huntley), demonstrations, models of course and by the thousand, old friends enjoyed, goodies carried home, clubs joined, ambitions fired. And there was time for all this. Time to sit on the SAM stand, time to just wander around (there was always tomorrow) and time to enjoy! I'd spend every day there - and now I'm glad I did. As John Perry will remember, big tins of beans kept me going!

Ends Tied up

As an add-on to JP's observation re DH88 Comet Black Magic, after the big race in 1934 where, it failed, the Mollison's sold the aeroplane to Portugal for fast air mail trials as Salazar and registered CS-AAJ. France fancied the idea and so the green Rubins machine became F-ANPY,



followed by a new one as F-ANPZ. Winner G-ACSS Grosvenor House went to the Air Ministry for tests at Martlesham Heath. A second new DH88 was completed ten months after the race as G-ADEF Boomerang for Cyril Nicholson. And yes, James, Black Magic is being restored here in the UK. Note the Tiger Moth above a DH88 under construction.

Couple of bits from Geoff Goldsmith



You may like this Dennis Bryant and Ken Marsh at Old Warden last June.

Milford Mite - I flew it today grafted into my Diamond Demon in place of an old Mk1 Mills.
It fly's it on and runs well.
Dick Roberts has gone beyond the call of duty to make it run, many thanks Dick, it did get a lot of copy in Speaks!



James,

Some photos of my Peerless Panther, uncovered, powered by a .75 Mills with R/C rudder only. It will be covered in black silk with red and silver trim. The silk is so old that the price tag says \$1.05 per yd.

David Acton



From Jennings Holt ...have you seen this site?...some good stuff on it...nice tattoo for a change...not the usual tramp-stamp...

<http://www.brooklynscrapers.org/gallery.html>

From Ian Avery in Oz

Hello everyone. We have just heard from Don that Gordon Burford passed away this morning at 3 am. We don't know when the funeral is yet though. I am sure you will all agree we have lost one of the greats.

THE AJAX from Peter Michel

I read with much interest Brian Cox's amiable and constructive criticism of my notes on the Ajax. However, I stick to my guns in that it is not the ideal beginner's model.

Perhaps I was a tad too harsh in my criticism of the design lay-out, particularly the CG, or balance point as we now have to call it. However, no less a flyer than Dave Hipperson once pointed out that all vintage rubber models need nose ballast. I'm sure he meant *almost* all, but he could have been talking about the Ajax. It is in fact quite nicely pro-portioned for cabin power if you were to round off the nose and build the bearers right back into the fuselage. (How about a 48in. Mills-powered Ajax for the Bowden!)



The Ajax fuselage compared with that of Coxall's cabin power Judy

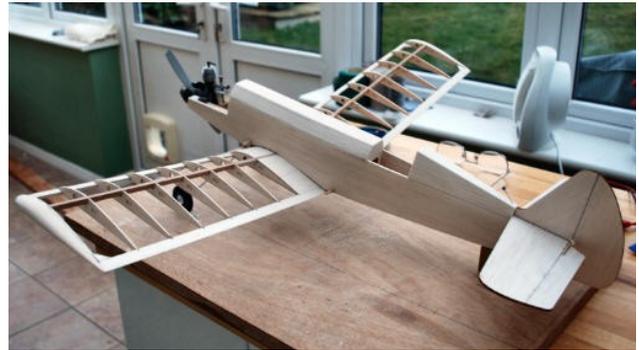
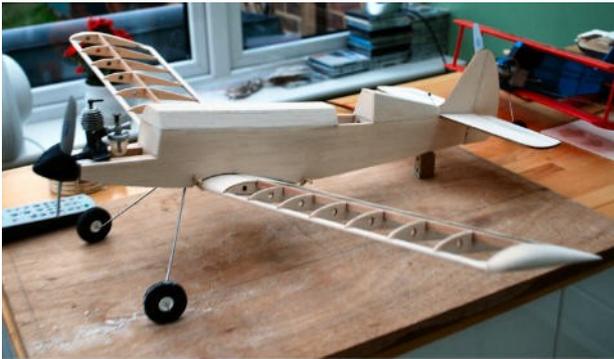
As for the avoidance of "cowhorn" dihedral, I maintain that all model aircraft wings with lower spars only are susceptible to it. You doubt that? Just look at how many models with this spar arrangement – Tomboys, for example – are disfigured by it. And no, I never over-dope. My standard finish after water-shrinking is one coat of clear dope heavily thinned to the consistency of water plus one coat of 50-50 banana oil/thinners. Tailplanes and the like get only the banana oil.

Regarding the structure of the fuselage, I changed from 3/32in.-sq to 1/8in.-sq. longerons and reduced the distance between the "shorterons" to prevent the starved horse look which Brian's Ajax, unlike so many others I've seen (poor, withered-looking creatures) has so successfully avoided. I might add here that my contest lightweights, such as the Pinocchio, Scram, and the Jack North, are of 3/32in.-sq. fuselage construction. No trace of starved horses with them because they have sensibly-spaced "shorterons". But with a fun model such as the Ajax such refinement, presumably in the name of weight-saving, seems unnecessary. And in any case there is precious little difference in weight between 3/32in.sq. and 1/8in.-sq. if you choose your wood carefully.

Medieval clerics are said to have argued about how many angels could dance on the point of a needle. Maybe I'm falling into a similar trap here. Just let me say that I agree with Brian that the Ajax is a happy little vintage flyer when (in my case) the snags have been ironed out.

He and I also agree on the colour scheme. When I saw the picture of his black-white-and-orange model in the February S&T I thought it was my own model!

Latest from Old School Model Aeroplane Factory



Wee Snifter. During first put together to check fits etc. Kit should be almost ready by the time you read this. Contact Derek Foxwell on 020 8647 1033

Response to article from John Maddaford

Re. S & T No.39 the picture of the 14.5cc Atom Minor now in the hands of Tim Wescott shows the A.E.Jones produced version of this engine having twin ball bearing crankshaft and fixed ignition timing as offered for sale during the mid 1930s. The engine is probably an early version from them as it is fitted with the Westbury designed mixing valve carburettor, which I believe was superseded by a simple venturi tube type allowing the engine to produce more power and providing better adjustment of mixture strength providing the fuel head does not vary greatly

As this engine is of the A.E.Jones style it seems unlikely that it has any direct connection to E.T.Westbury other than being the designer of the engine in its original form.

The original 14.5cc engine design was published under ETW's name in the 'Model Engineer and Practical Electrician' during October 1932 with the heading 'The Atom Minor Model Aircraft Engine'. The design as then published had a plain bronze crankshaft bushing and adjustable contact breaker. E.T.W. states that the castings would be made available from Messrs A.E.Jones of 97 New Oxford Street, W.C.1. Westbury claims 3,200 RPM using a 15inch X 12inch pitch prop and over 3,500 RPM with a float feed carb. fitted. He also mentions that Captain Bowden is trying out this engine.

Thank you for the kindly mention of my engine making activities but I would certainly not regard myself as "expert" regarding the Atom Minor or anything else for that matter. To avoid any confusion, I have made only two 14.5cc Atom Minors and repaired a couple of others. The Westbury engine that I have made in greater numbers over the years is the 6cc Atom Minor Mk.III, this design having been developed by E.T.W. from the pre-war 6,3cc 'New Atom Minor' side port engine into a rear disk rotary valve induction design which was eventually published in the Model Engineer during 1948. These engines with a few minor mods to the ETW design will turn a 12" x 6" pitch prop. comfortably at 6,500 RPM and also they throttle very well for R.C. use if fitted with a suitable carb.

The book you refer to detailing the construction of this engine is published by TEE Publications and I think is still available from them.



Hi there James, from Rich Harris

I have been asked by Richard Bavin to forward these photos to you of his 'Tethered Trainer' which my old man (Pete Harris) test flew for him last weekend. Rich was too 'chicken' to have a flight but I think he enjoyed watching all the same, it flew really well once we got the engine sorted.



Couldn't get it to peak out on

straight fuel so we tried some 5% synthetic and that did the trick.



My old man had about 4 flights with it then he turned to Richards 'blue pants' (that doesn't sound right!) and maiden that for him. Engine ran sweet and he soon had doing aerobatics.

I made 2 videos of them flying here are the links if your interested?

Blue Pants

<http://www.youtube.com/watch?v=X3XNKuP9Vko>

A short flight of the Tethered Trainer

<http://www.youtube.com/watch?v=mWs6WJblm4k>

Also again if your interested a few video links to some of my models including Bowden Mose, Scarab, free flight Tomboy (my first attempt at a free flighter and running a Diesel Engine)

Please excuse the noise of the autofocus on some of the vids.

Bowden Mouse

<http://www.youtube.com/watch?v=5egpZp6SIfc>

Scarab

http://www.youtube.com/watch?v=tXQWyW_cRSk

Tom Boy (Indian Mills .75 powered)

<http://www.youtube.com/watch?v=5egpZp6SIfc>

Free Flight Ebenezer Sportster Indian Mills .75 powered (a hair raising model to say the least!)

http://www.youtube.com/watch?v=_eLa9toZYZ4



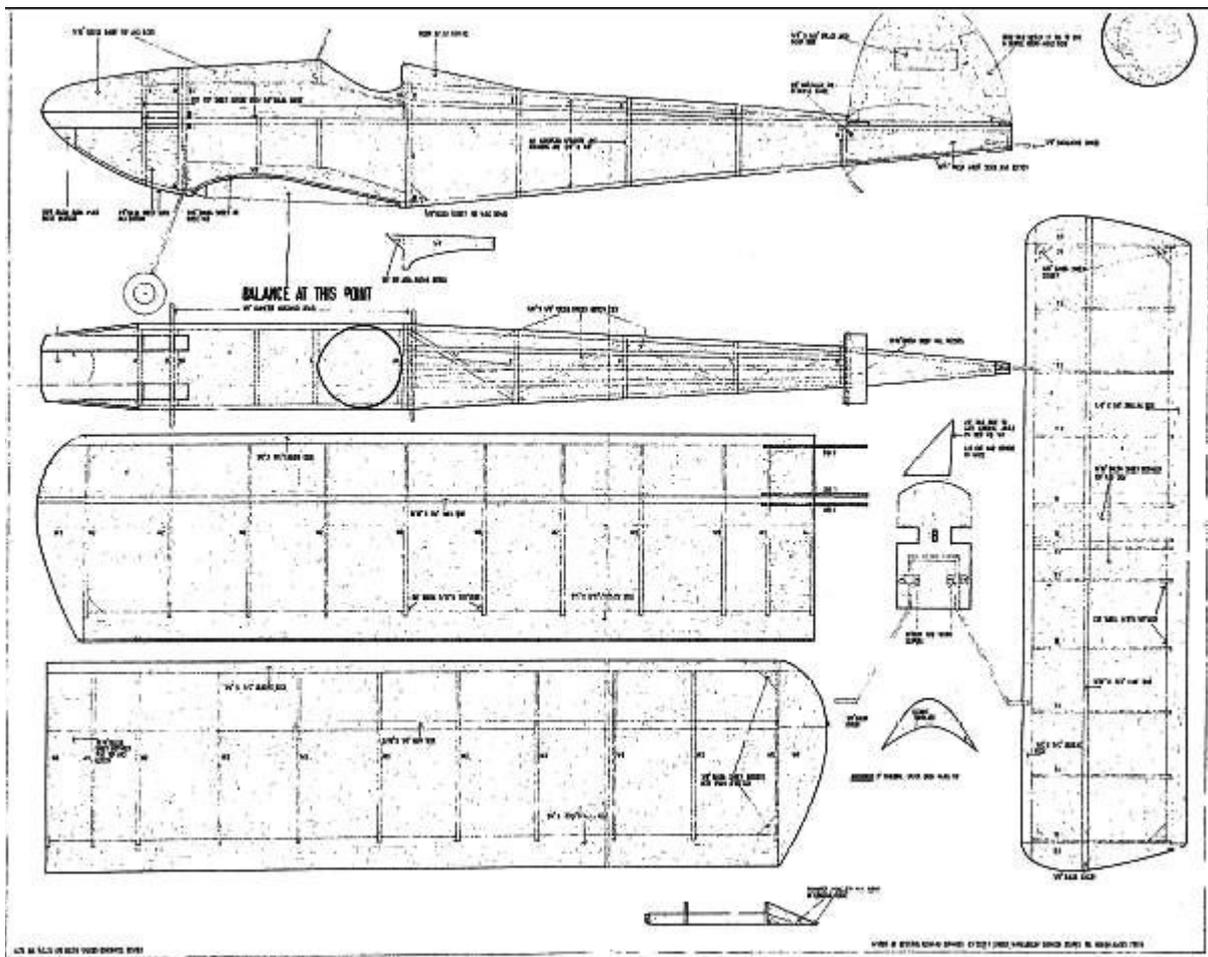
This last video is of my friends Mini Robot flying with some old escapement gear installed and powered with a Frog 80? He let me loose on the sticks...sorry BUTTON!! Great Fun!!

http://www.youtube.com/watch?v=-zJabGF_XoI

I am planning to build the original sized Scarab to go with the 'old Boys' to the free flight events this year. If your interested I could send dome photos when I am finished?

Hi James

I wonder if you might recognise the attached plane. I am restoring the plan but can't find any identification. There looks to be a logo or symbol of a planet in the top right but no other info. If you recognise it please let me know whatever info you can. Best regards Derick



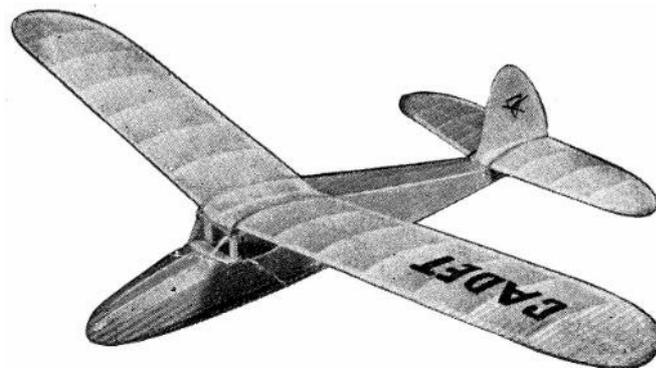
From Barrie Finneran

This month lets take a peek at a small version of the Rudder Bug. My fire was stoked when I watched a diesel powered version of this mini sized Rudder Bug flying late in the day at Cocklebarrow . I was so taken by this sweet little model the collection just had to acquire one. More easily said than done, a quick rummage in the plan box proved very fruitful, out came a magazine free plan drawn by David Boddington. At 37ins span it was ripe for a brushless electric motor conversion and a lipo battery but as my building skills are of the hammer and nail variety a quick trip to see "Old Bill" was on, In just a week Richard Bavin had produced a quite exquisite little model finished to perfection with opening side door/window. How does it fly, great, for such a small model it is very groovy, stable and forward flying, but, to date it has used two of its nine lives. The first one when flying at home I forgot to extend the transmitter aerial resulting in the little sole going free flight, fortunately the model having been trimmed out to fly in the radio assist mode went into a big circuit until the problem was spotted and control regained. The second incident was what appeared to be a 2.4 gig lock or brown out when flying late in the day at Cocklebarrow Farm , a long 4 seconds then all worked normal again. Or did I have a bout of the frozen thumb syndrome?, or was it maybe a memory flashback to free flight days, having had no other problems with the Specky system I will never know. A number of photographs were taken to try and show the heavy belly look so characteristic of these models when viewed from three quarter front or the same from the rear, no joy maybe it will show better on the larger version. You know the image , like an old gent doing press-ups and some bits don't leave the ground



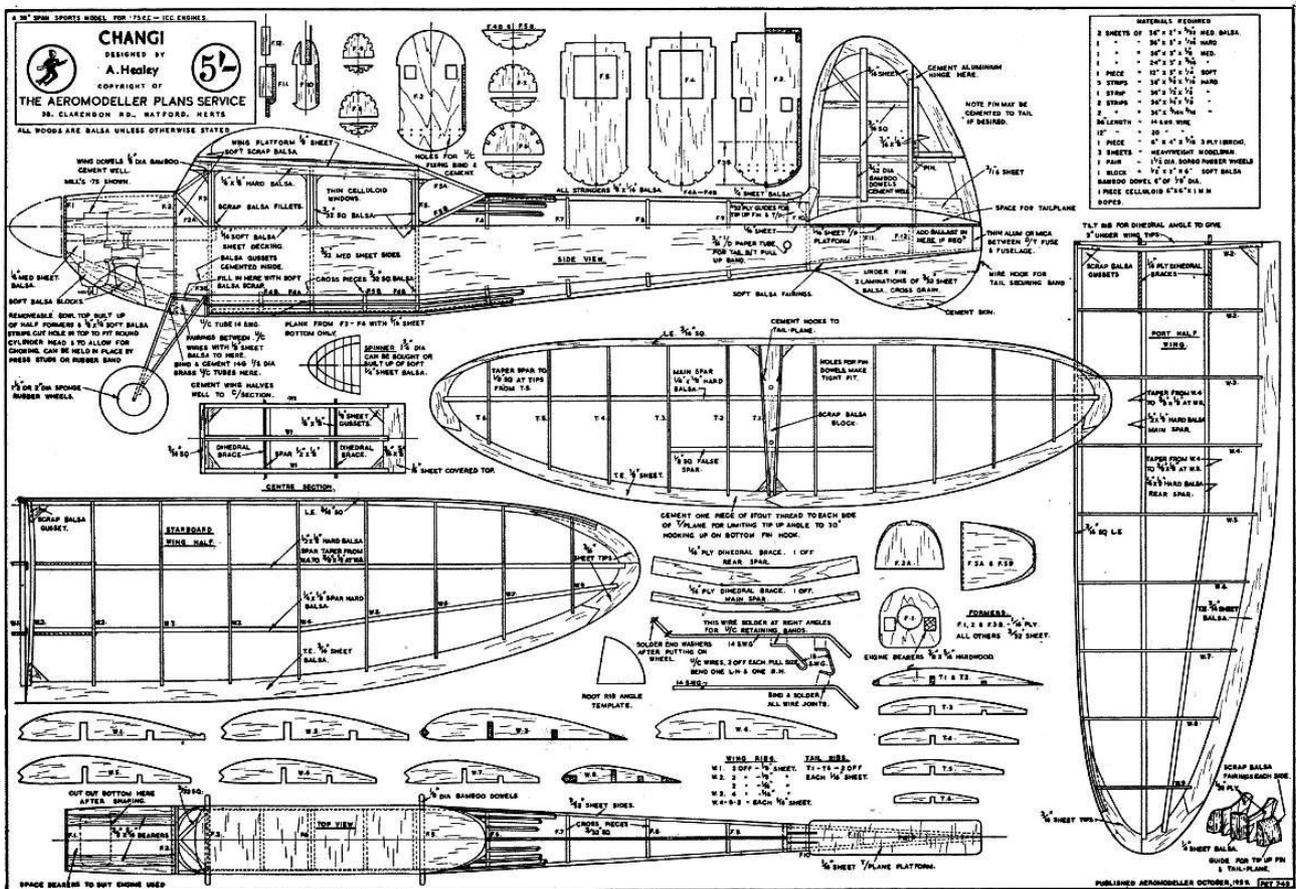
to see if conversion to electric is possible without too much structural surgery, at present the just enough power comes from an early SC52 FS.

Have not gone into the origins of the Rudder Bug and the Good brothers that will come when the original 72inch size is featured, at this point in time I am looking

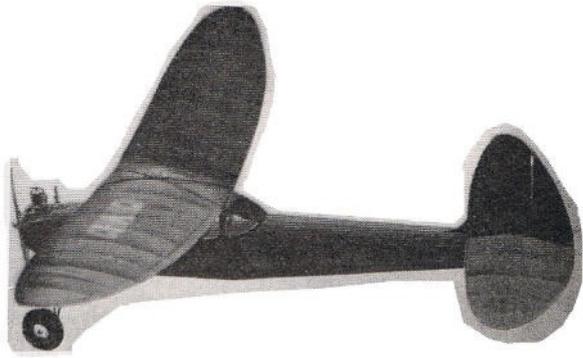


From Michael Burke

I wonder if you know of anybody who could supply the above plan as I have tried a number of sites in the USA but no reply also included a couple of pics of my lancer 72



October 1959 Aero Modeller Changi by A Healey a 38" span sporster for .75 - 1 cc.



AEROMODELLERS IN THE Royal Air Force will recognise from the title of this model that it has Far East connections. The model was built when its designer was stationed out at Changi in Singapore, where model flying conditions are ideal, even though the humidity tends to wreck the absorbent balsa structure.

Changi is a model in the old traditional sports style and for this reason we are sure it will be very popular for those who like to incorporate pleasant appearance in the form of elliptical surfaces and a large expanse of transparent cockpit windows. It is a very stable model and is quite robust. In its general lines one could say that it shows the influence of Keil Kraft's popular old stager, the "Scorpion" coupled with scaled down lines of the popular A.P.S. "Eros". In the photograph you will see the engine mounted upright for convenience, but appearance is enhanced by inverting the cylinder. Construction is easy, using the side sheet flanks on the fuselage to align the formers and with stringers to make up the semi-elliptical cross section.

Trace two sides on to 3/32 in. sheet medium balsa, marking former positions. Cement together at the rear and place upside down over plan view, joining together at former positions with 3/32 in. square spacers. Whilst this is drying, cut out all formers (including holes for engine bearers). Cement bearers into F1—F3, bind and cement u/c tubes to F2 a F3. When dry cement in formers F1—F5, first taking care to check the correct alignment then fit remainder of formers, followed by stringers, wing platform, fin guide, and plank or fill in with scrap balsa where indicated. Upper cowling was built from 1/8in. by 1/4 in. planking and the lower cowl from soft block.

Mark position of wing ribs on spars which taper from 1/2in. by 1/8 in to 5/8in by 3/8 in. (main spar) and 1/4 in. by 1/8in. to 3/16in. by 1/8 in. (rear spar). Place spars over plan, cement ribs on, noting W I on each half is inclined to give correct dihedral angle. Follow with the leading edge and trailing edge, finally add the tips and when dry, sand them to shape. The centre section is sheet covered on top only. Fix in the ply dihedral braces and assemble wing panels at correct angle. The Tailplane L.E. is 3/16 in. square steamed to shape, otherwise construction is same as for the wing. Cover all model with heavy weight tissue, give three coats of dope and fuel-proof the fuselage. Bind and solder the undercarriage, fairing in with 1/8 in. sheet balsa tissue covered, solder wheels in place on axles. Trim by adjusting the tail angle for a smooth glide and if built to the plan you'll soon be rewarded with a pleasant steady climb and floating glide.

FORTHCOMING EVENTS NOT TO BE MISSED

Middle Wallop Easter Sunday 4 April RC vintage (Include Tomboy and power duration comps) and control line (Free flight on Saturday Sunday and Monday)

Wimborne MAC Cashmoor Sunday April 11 Control line day

Middle Wallop Easter Sunday 9 May RC vintage, (Include Tomboy and power duration comps) control line and of course free flight

Wimborne MAC Cashmoor Sunday 16 May Radio control vintage day

More information from me James Parry at JamesIParry@talktalk.net

Eminent American Entomologist, hence the name for this snappy design, Mr Davis is 51 years old, lives at Dansville, N.Y., and has an appreciation for models to be flown for fun rather than for contest. A super-stable 4-ft span biplane for radio control with rudder only, or pure sport free flight.

June Bug 1 was designed as a result of, a dispute with a fellow modeller over the possibilities of powered biplanes. It was powered by an original Garami "Atom" (1.6 c.c.) and had 32 in. span giving 235 sq. in. wing area. Certainly it flew, but was rather 'difficult to handle-too much fin area and not enough dihedral. June Bug II corrected this error and was entirely satisfactory. Powered by a Super Atom, mounted inverted, it could be adjusted to do very nice loops by loosening the screw on the spark advance slightly.

It would climb to about 40 ft. and as power increased, due to automatically advancing timing, it would start looping and continue until the engine timer shut off.

June Bug III was very similar to J.B.II, with same span and area, Super Atom powered, but featured a float gauge in the fuel tank, shorter landing gear, and the present system of mounting the lower wing. Mark IV was the first diesel powered 'Bug", and this was a delightful free flight model.

Powered by a converted Arden, then an Amco .87 c.c., then a Mills -75 c.c., it was a favourite until summer of 1956, when it flew away. It was returned this spring, but there was little left of it except the Mills -75, which started with a few flips and ran as well as ever!

June Bug V was the first 4-ft. span model for an Elfin diesel. Mark VI, the latest model, has a David Anderson Viking 2.5 c.c. (minimum recommended capacity) and is a veteran flier. It needs 8 degrees right thrust with a 10-in. x 4-in. prop for straight flight, to counteract the usual biplane torque effect, and will fly as though on rails. Stable as the Royal Scot is on railway lines, June Bug is a compact design for easy transport and takes any motor from 2.5 to 3.5 c.c.

The fixed tail is a personal preference, being rigid and extending out behind the fuselage, it offers a good deal of protection to the rudder mechanism when the model is being carried or flown. Details are given for alternative detachment.

The fixed tail also lends itself to elevator installation, although the 'Bug" is primarily for the rudder-only fans. Being rugged in the extreme, simple to make and pleasing to look at both on the ground and in the air, June Bug is a Biplane with personality and one which many modellers will enjoy for simple sport flying or It /C contest work.

It is not intended for the beginner, but any builder with experience of a power model will find all the necessary building detail on the full size A.P.S. drawing.

Epsom Downs 13 March 2010

With time to spare I stopped off at Epsom Downs flew Tony Tomlin's MP Jet powered Tomboy and took a few photos, here they are.



Peter Michel's Pelican



Doug Jerome is on the other end of the rubber



David Beales blowing the embers

Cashmoor 16 March 2010

On a flying site, second time in one week! This time home club, Wimborne MAC



John Taylor's ex rubber Farman now electric



My Tomboy and Devil Bat



Chris Hague's 1.3x Viper with Fox 35



John Bainbridge's Junior 60



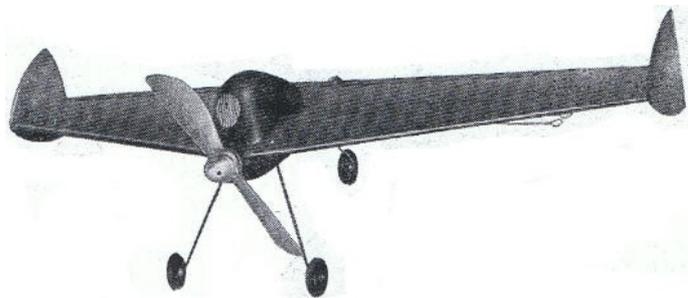
John's farman again with Miss Philadelphia and own design 600RES glider



Dave Ashenden's unknown model

"Old Bill"

Earnest appeal for a plan or kit of this Sky-lead-a Flying Wing control line model. Picture taken from February 1949 Aero Modeler.



Just completed the Veron Bee Bug with DC Merlin power, yet to fly.

Inspired by Mike Crisp's beautiful tethered car is this photo of my little economy version by way of Pee Wee Racer from Black Hawk Models, performance 50 mph with Cox 049 motor.





I enclose some images of the Tethered Trainer (*Others were same as sent by Rich Harris so not repeated her JP*) now flying! Last weekend I was invited to fly at the Kidderminster, Oldington Model Flying Club, Chairman Peter Bailey. This predominantly a Radio flying club and the welcome they gave me and help from all the members present deserves mention. To name a few Dog handler, video man Adam, Richard Harris (Autogyro man) as flight engineer, Richard's dad Pete as test pilot – all of

whom gave me a great day out. The Tethered Trainer, using Ohllson 33 yes 33 motor, glo version had its first flight on straight fuel 25% castor, on low power 7,200 rpm using 9x6 prop, motor just wouldn't go any quicker! Very very slow even I wouldn't have got dizzy. Next flight I used standard synthetic oil, 5% nitro fuel – over 3,000 rpm increase – model now flew like a "normal" control line model, rather than a goat. Good line tension on 52' .018 lines. High level circuits still maintained safe tension. Pete said I could manage it to get back into "Dizzy bugging". Timed speed was around 50mph, now motor was leaned out properly to summarise model will fly very slowly and also at normal speeds.

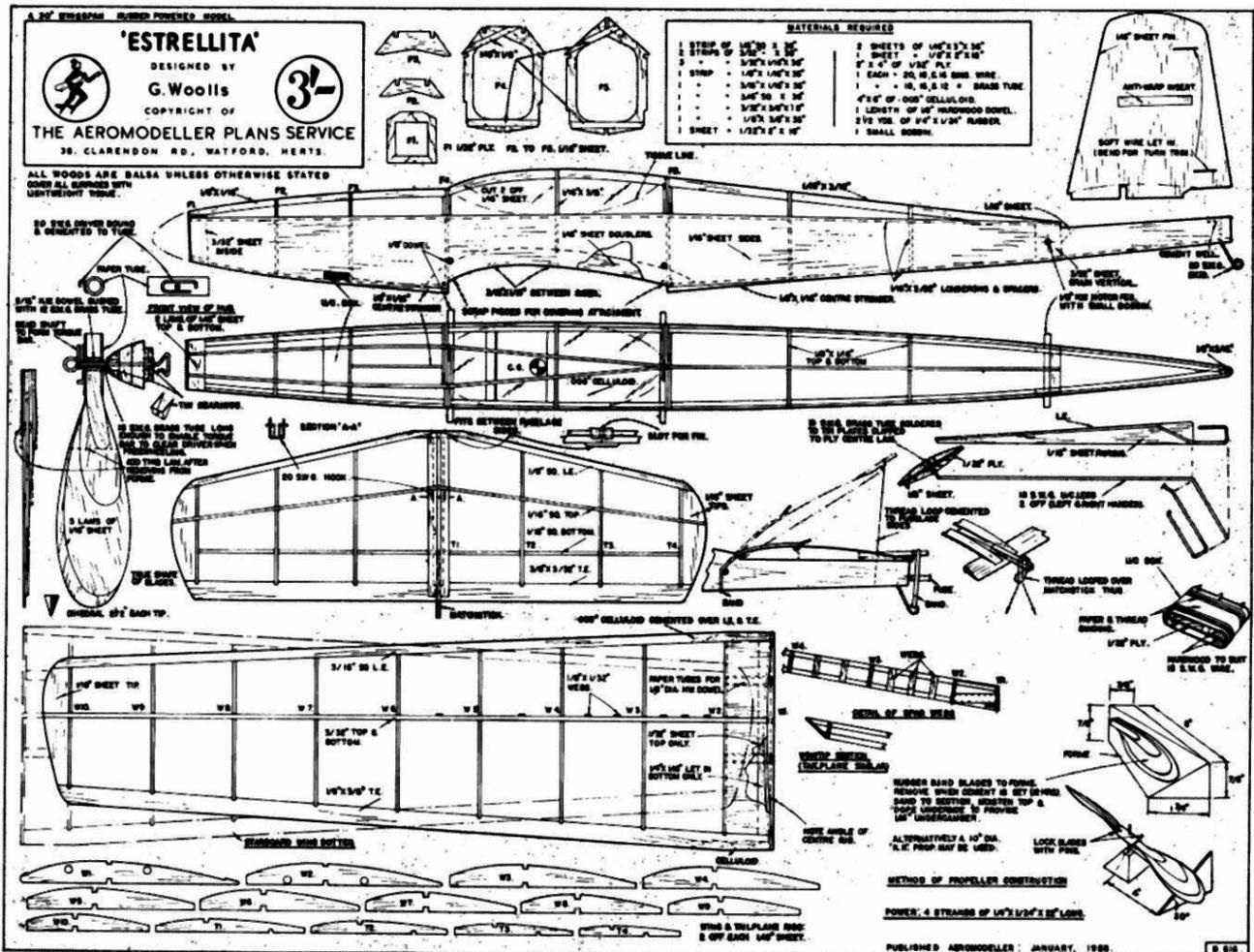


We flew my Blue Pants, Elfin 2.49 powered later and speeds were the same so in conclusion many thanks Oldington for a great day out aeromodelling as it should be. I also had chance to fly my Scarab with richard harris while he was setting up his cylinder wing model.

If you have a Flying wing plan or kit please contact Richard Bavin on 07971546163

Richard is also after an O&R 23 Glo front induction, if anyone has got one they would like to sell for use in a model please give Richard a ring.





Estrellita from Aero Modeller January 1956

A 30 inch low-wing that will bring back fond memories for pre-war fliers, and makes a fine sport model for small field flying ... By George Woolls



THIS LITTLE LOW WING, was developed in an attempt to get regular "fun flying" without too much cross country chasing. The comparatively low power, (half an ounce of rubber for an overall weight of two and a half ounces, and very modest by present day standards,) is however, sufficient to provide realistic take offs, fast climb, and regular flights of around the minute mark. Landings are a pleasure as they are "wheely ones" with the model remaining right side up—given of course a reasonable surface. The youngsters who have never flown a low wing have a treat in store, while to our contemporaries, we say, "Why not revive memories of the old 'Kinglet', 'Avis' or 'Kingfisher'?"

Use best quality medium balsa, golden white with straight grain throughout.

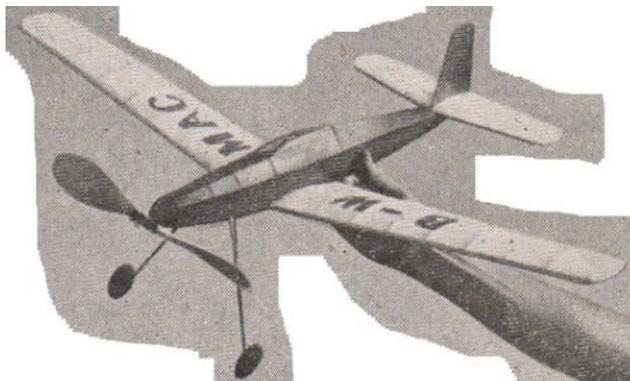
Cut the rib template from 1/16 in. ply or thin metal, leaving out the slots for spars. Using this one template all wing ribs may be produced, by cutting to length from the back and producing a new straight undersurface. Positions of spars can be marked off from the plan. As Leading and Trailing edges are laid flat on the plan no difficulty should be encountered in wing assembly.

The tail ribs are produced in the same way as those for main plane using another template.

Cut the fin from A in. sheet, and an anti-warp insert fitted as shown. The short lengths of soft wire cemented into slots enable the rear edge of the fin to be bent as required to produce- flight turn. Stick scraps of gummed paper strip over the bottom edge to make a firm fit in the tailplane. This does away with the need for cementing, and so saves space in your model box.

Cut the two fuselage sides from 1/16 in. sheet, using the wing rib template for the wing mounting cut-out. Pin them together and lightly sand paper their edges to ensure their exact similarity.

Cement on the longerons, spacers, wing mount reinforcement etc., making certain that you produce right and left hand sides. Cut out formers F'.3 and F.5 and reinforce with 1/8 in. x -1/16 in. as shown. Cement sides to formers and when dry, draw the tail ends together. Cement on nose former, and then add remaining formers, cross spacers, stringers etc. Build up the undercarriage box from plywood and paper as shown. Bind with cotton well cemented in place, and assemble into fuselage.



The undercarriage is pretty straightforward, just make sure that you make right and left hand units. Celluloid wheels can be used if desired.

The propeller blades are formed from four laminations of 1/16 in. sheet, cemented together and left to dry bound to a twisted form. The blade is removed, the fifth lamination added to the back, and sanded to final section, plugged into the paper tube hub, set to correct pitch angle, and pinned. The hub is plugged with hardwood at the centre, bushed to receive the 16 s.w.g. tube which forms a shoulder and thrust bearing on the 16 s.w.g. wire shaft. Check that the hub can slide fore and aft sufficiently to permit the wire "driver" bound to the hub, to clear the torque bar on the shaft, thus ensuring freewheeling.

Cover with lightweight tissue, water spray, and dope with thinned clear dope to which a few drops of castor oil has been added. Pin down wings and tail while drying.

From Peter Michell

Great afternoon on the Downs today. The picture shows me with three Judys!

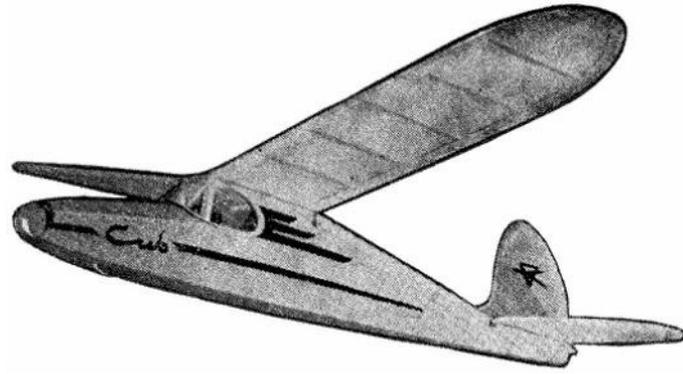
The glider in my right hand is my copy of the original Judy by R F L Gosling, which I am holding on my left. On the grass is Coxall's Judy (Mills powered).



Both the gliders are "floaters", so much so that the owner of the original, Tim Westcott, dare not put upon the line because unlike my model, it had no DT. It made some nice slope – lift glides from the hand, though, and Tim has the pictures to prove it.

The Judy (powered) made several RoGs which made me wonder why the cabin power fraternity at Middle Wallop always hand launch. They miss so much.

The Judy, incidentally, was my first power model, made when I was about 17. So she flies again, 60 years on.



The end for another month.