

Sticks and Tissue No 33 – August 2009

I'd like to thank all the contributors, without whom this newsletter would not be possible including Alan Jupp for the magazines.

If you can contribute any articles, wish to make your point of view known etc please send to or phone 01202 625825 james.i-parry@tiscali.co.uk

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

The content does not follow any logical order or set out, it's "as I put it in and receive". Writings and opinions expressed are the opinion of the writer but not necessarily the compiler/publisher of Sticks and Tissue.



Picture taken at Chesil Club (Bridport) 15 August 2009

Allan Laycock Regards from Australia,

You mentioned Comet models and dimescale rubber models in #32. Attached for your info is my scaled up 'dimescale' Comet Curtiss Robin. It is 45" span, covered in Airspan (much better than any tissue I have used) with a direct drive Speed 400, uses a 1000 mah 2 cell Li-po and weighs in at 15 ozs. I use a Futaba 2.4ghz and 9 gram servos and it flies very easily or vintagely. I will box this model and take it with me to compete with it in the US SAM Champs at Las Vegas in 2009.



1/4A free flight retro from Stephen Winkworth (South of France)

I live in the south of France, and am a rather lone-wolf aficionado of retro radio assist. Recently I've been busy building a tiny model especially for the Clan diesel. (The last one I tried was too heavy at 5 1/2 oz, and though it managed one flight with the Clan, it was pretty feeble and now flies only with the much noisier and less pretty AE 0.2).

I based the model on a special 1/4A design called 'Pee-Wit' by a certain P. Gasson which appeared in Aeromodeller (Feb 1961 issue). His was just a tad smaller, as it didn't have to carry a radio, but was said to be suitable for the 0.2cc Adams Dragonfly diesel, so I followed the design fairly closely, as he



really seemed to know a lot about ultra-light structures. I called mine the 'Pirouette'. It took absurdly long to build: the tailplane for example consists of an outline 4 lams of 1/32x 1/16. laminated round a template glued together and allowed to dry, then filed down to streamline section, a 1/16 sq spar, and 1/32 x 1/16 diagonals above and below the spar. Where the diags overlap the outline infill pieces of 1/8 x 1/32 above and below are added: 12 on each side, and sanded down

to blend with the leading and trailing edges. Various tiny gussets around the centre section complete the structure, which when covered weighs about 1/10 of an ounce. The fuselage, also built of 1/32 sheet and 1/16 square strip (all cut by me from sheet by the way), contains over 100 individual pieces of wood. It has a crutch with warren girder diags and an inverted 'U' beam, slightly curved, of 1/32 sheet. The wing has 1/32 ribs, a mainspar of 1/16 x 1/18 tapering to 1/16sq, i.e. 1/16 in an 'L' shape, and a trailing edge of 1/32 sheet with a strip of 1/16sq at the rear. The diagonals are 1/16sq let in



after building. Covering is Jap tissue.

Anyway, finally the flight tests were successful. The model, with its final weight of 4 oz including just over 1 1/2 ounces for the receiver, single servo and nicad, is at about the upper limit of wing loading for its 23.25 inch span and 98.8 sq in area. The engine needs to be set at max revs for a shallow climb: if slightly rich or over compressed the result will be a powered glide. As is traditional, following days or weeks of fine weather during the building process, a spell of violent wind occurred; but this morning near calm, with cool air and bright sun, prevailed.

The first flight resulted in a slow climb to about 50ft and a reasonable glide. The second, after various adjustments to incidence and rudder, was much better, and some swallows were chased in a low thermal. By the third, the thermal had developed a little, and Pirouette darted around, reaching at least 200ft, whereupon it had to be spiralled down (loses height rapidly in a right-hand turn), and a prolonged glide with a nice soft landing were my reward. I also attach a picture of 'Pirouette' showing the 'radio hatch' on the side of the fuselage, which enables the battery to be connected (obviating the weight of a switch).

I also enclose a photo of my version of 'Oomph', powered by a PB 0.33, in its box. Boxes make models so much easier to transport



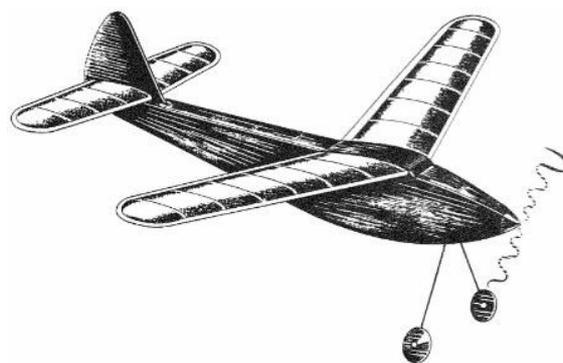
and they extend the model's life - they are also quite fun to make. I have modified the original design by F.

d'Huc Dressler, which was shown in the January 1949 'Modele Reduit d'Avion'. So I think one can assume that the prototype was flying in 1948!

It takes about 2 minutes to assemble ready for flight.

This model is built to accommodate other engines fairly easily: e.g. Pfeffer 0.6BB with R/C carb. (The throttle

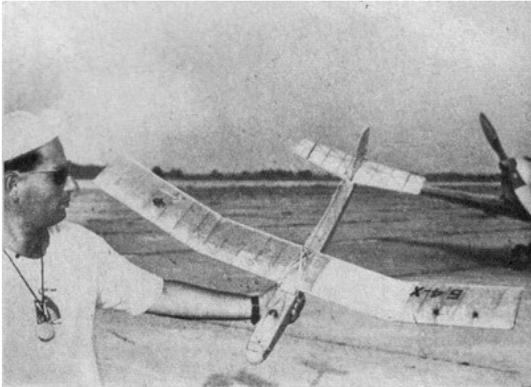
pushrod needs to be changed of course.)



I'm really pleased at the contributions of words and photos from a growing wide range of countries, absolutely fantastic and what it is all about. The following from Hungary in Hungarian/German. I again resorted to Google Translator and whilst this is far from perfect for our purposes allows an article to be read. I have refrained from editing beyond this as it dilutes and I may get incorrect.

From Krasso Tamas in Hungary

Y Prob fonetic anglis speek! Y have Model Forum: www.sryforum.atw.hu



I make 1968 a national record with Soaring model Cinege modern version! The ISZT Cinege name, Konstruktor



George Benedek.



I champion in Hungary CO2 Maket model. I am a Taylor Craft maket modell, fantastic Flige well.



<<<<<<<Recsk 2009

Busy day for R/C Tomboys at Old Warden by Tony Tomlin.

Sunday, 28th June was the second day of the 2009, Sam 35 meeting at Old Warden. This also hosted the 7th round of the Tomboy3 [36" span Mills .75] and Tomboy Senior [48" span Mills 1.3] competitions. The format was as before with two 4 min. max flights required to enter the mass

launch fly off. Entries were expected to be possibly in double figures as this competition is becoming more popular at each meeting. Tony Tomlin, who was running the event, was still surprised that he had 16 entries for the Tomboy3s and 14 in the larger senior class. After trimming flights by the contestants, 12 made the fly off in each class.

Tomboy3s As the engines were started for the mass launch of the Tomboy 3s, a spectator described it as a sound similar to a Lancaster taking off! Certainly there was much excitement as 11 of the fast revving Mills .75 Tomboys climbed away. Unfortunately Tony Overton was excluded as he launched late. The winner, with an exceptional time of 25 mins 14 secs, was Tom Airey with Brian Austin, in his second Tomboy event, claiming 2nd slot, with 22 mins 07secs, and Geoff Stubbs a delighted 3rd, at 21 mins 33 secs. The next finisher had a time 9 minutes less than the 3 winning fliers, such was their performance.

Tomboy Senior With the quieter Mills1.3 in the larger 48” Senior class, the fly off was expected to be a less dramatic spectacle. How wrong we were as, due to the very similar performance of the majority of the models, 11 climbed away, as in formation, appearing to fly much slower than the smaller Tomboys, all very close and not separating for around a minute. Stephen Powell was unfortunate in having a radio problem and was disqualified by landing out of the prescribed landing area. The deserving winner, after his disappointment with the smaller Tomboy class, was Tony Overton with a good time of 14 mins 5 secs, a little over 3 minutes more than John Strutt who landed at 10 mins 57secs with Tom Airey 38 seconds before to claim 3rd place. Again there was a gap, this time of 2 minutes, before the next competitor. These Tomboy competitions have gone from strength to strength in the last 3 years+ and due the performance achieved are becoming something of a ‘Specsavers Benefit’ event!!

it is intended to make some simple rule changes shortly to help overcome these problems. These will not require changes to the models but will be centred around the fuelling and launching procedure.

For more information on the Tomboy3 and Senior classes please

contact:; Tony Tomlin; 086413505 email: pjt2.alt2@btinternet.com



1953 photo of Albert Wastable of Moullins Allier in France with his 6 tuned reed unit RC model controlling engine, elevator and rudder.



From Roger Cooper

What an interesting discussion the vintage radio one is becoming. I have just enjoyed reading your dissertation on the subject and a really provocative thought comes to mind!

"If we are going for vintage radio why not be really strict and go back to using valve Tx and Rx and rubber driven escapements with either 2 or 4 arms just as we used to do in the good old days - at least we ought to have the technology now to make the kit more reliable."

I just wonder if the modern technological facilities for flying a number of models all together on different channels would be possible, because if it is not then my idea is a non starter.

Guess I'll have to keep my eyes really well peeled now as someone out there will have a hit man hired to assassinate me for such controversial suggestions!! I think Boddo lives nearest to me!!



David Kinsella's column

The Phil Smith Story – Part III

Gold Cup champion and mainspring at Veron, Phil's introduction to the world of technology was via Dad and the brass headlights on the family Clegg-Darracq, these instruments requiring refills of water and carbide and frequent polishing - which earned two pence a week pocket money (old money and 83 years ago, young Phil able to drive too thanks to lessons around a farmer's field). Dad always had cars, one a Clyno, and Phil passed his test first time in a Humber saloon. Considering his wide ranging trips around the country and early encounters with model and full size aeroplanes (Part II) it's not surprising that Phil joined the Royal Air Force. With a stint on Field Experience with 22 Squadron operating Beauforts, Phil arrived at impressive Halton House, forty miles north of London, to train as a Technical Instructor, eventually passed to work with Halifax and Lancaster bombers. A spot of flying was involved, Phil knocking up a good few hours on Beauforts. Young in the age of the piston engine with its oil and petrol smells, the camaraderie of the UK at war, is it any wonder that this 'boy in blue' would seek a related opportunity in the air minded atmosphere of post war Britain. As a measure here, some RAF stations held Battle of Britain celebrations for a whole week

Stentorian!

What a name for a model aeroplane. So Roman Empire, it brings to mind the clink and crunch and kilt-swing of the Ninth Hispana on their way through the garrison city of St Albans. But via our model pictured here we join a young Phil Smith in the RAF, designing a power model for his 6cc Baby Cyclone, sparky in yellow and black and named Cadillac. Soon with Veron at Bournemouth, Phil decided to link his super model with the Ted Martin-designed Stentor motor sold by Veron and thus Stentorian became the perfect choice! It flew in the Bowden at Fairlop east of London in 1947 and has continued to perform splendidly ever since, but these days with a Merco 29. Interestingly, flying in the Irish Nationals at Baldonnell in



1947 Phil acquired an Ohllson 60 (one result being additional wings for a biplane Stentorian). A presence for so long in our hobby, brand new Stentorians appear as evidenced by Alan Walker's OS46 example pictured. Plug-in wings and u/cart easily solve any transport problems with this 6ft beauty drawn up when the Spitfire was still in service. A great model.

Ashes Giants

A mighty beard with a man attached, a sort of Santa Claus in whites, even the cause of the Ashes and several disputes, we all remember Dr W G Grace. Later there was the incredible Bradman - Sir Don no less and twice as good as the next best - blamed for England's defeats, unemployment, even the bad weather. But strangely lost to memory is Charles Burgess Fry. A stunning all-rounder - Oxford academic, athletics with two triple Blues, a football cap for England, a 13 year Ashes career, a god-like earlier version of Clark Gable - C B Fry was Wilson in The Wizard comic and nicknamed Lord Oxford, Charles III and The Almighty. Amazingly, and it nearly happened, he was lined up to become the King of Albania!

Keil Kraft Scale

Sorting out a 20in Stuka kit recently reminded me of that great KK range of 25 or so models costing around 3/9 when the Skylon and Dome of Discovery were visible on the South Bank. Shops selling them could request a works model for display, and in due course a perfect Fairey Gannet or Mustang would arrive for the window (how did they do that perfect tissue covering and glass-like dope finish?). A number of us at Belfairs MAC built them for RTP, and not massively powerful the ED Baby served well to send them around trailing blue smoke and delightful smells. Blimey, what fun we had all those years ago: Raleigh or Phillips outside, tree house high up in the woods, an old dinghy to sail in the summer, not a care in the world. I think a Hank Mancini standard has the words: 'and there's a door, a door marked never more'. Sadly, none of us out in the sunshine flying models over grass long lost to boring commuter homes realised how lucky we were (this would go on for ever, we thought...)



Hollow Arm Bootleg

Here we're concerned with music and the voices of those who make it. Not supposed to do so, key events have been captured for posterity by these bootleg fellows. Equipment in the old days was not easy to hide when entering a concert but it was done: hidden in a wheelchair, stowed in a fake plaster cast for a broken arm, bits taken in by as many as a dozen and assembled inside, secreted in the hall long before the event. When Dylan came on with electric guitars for the second set a yell of 'Judas!' was recorded - and later sold as Dylan At The Albert Hall (in fact the hall was the Free Trade in Manchester, but that would mean little in the USA). Characters such as Rubber Dubber had their own production line for this bootleg material, a good living enjoyed, but arguably the first was Lionel S Mapleson in New York who used one of the first Edison machines more than one hundred years ago - when rock was part of the Earth's crust.

Skyleada

At 180 London Road, Mitcham, Surrey, Skyleada offered a good range of kits from 3/- (15p) to 9/- (45p) in Festival of Britain year 1951. I built their fluster and Tiger Moth, also a Baby-powered SE5a, at the time finding an old Great War pilot who flew them in those pre-parachute days. After a while I sold the SE, later discovering it on the large glass counter at Paramount's shop in Westcliff on Sea, Essex. The Skyleada brand was the property of the British Model Aircraft Manufacturing Co Ltd, and it would be interesting to gather more information here.

Close Shave Stuff

Ready for the Moon Shot forty years ago, Grumman on Long Island had built the Lunar Module that covered the descent stage. At first too heavy by far, NASA offered a 25,000 dollar bonus for every pound saved. Operation Scrape shaved metal everywhere and acids were used for further thinning. When Armstrong and Aldrin dropped their Eagle onto the Moon it was more than 2,500lbs lighter! In the 1950s Grumman staff had helped Briggs Cunningham with his sports car project.

Bassett's Beauties

Bassett Lowke's London shop was opposite Holborn station, a gantry of signals on the outside wall visible a long way off. Strong on model railways thanks to Henry Greenly, the Northampton works also produced a range of boats, some large enough as battle ships to sit in and sail in mock battles. Steam, electric, clockwork and rubber-powered boats appeared in various sizes, like Bowman's to some extent and usually of wood. All of top quality, the large models were not cheap (their best loco pre war was £500) but their excellence could inspire model fleets and railways of estate dimensions. Racing driver Prince Bira and his manager Prince Chula, when not yachting, operating Maseratis and ERAs or flying to Bangkok, were regular customers. Old catalogues are a source of information, but the Bassett Lowke history as published by New Cavendish tells the story in great detail. The steam launch of wood is aft long and all of seventy years old.



The Pits

A recent comment in SAM 35 Speaks referred to the steady increase in control and restriction. Within days a feature was spotted elsewhere re the demise of sandpits in parks and playgrounds - far too dangerous, you see. But kids with buckets and spades love 'em, especially if a day by the seaside was out. Long ago a certain store in Knightsbridge had a wonderful sandpit and a pond in the Toys Department. To Mr Georgiades I'd call out 'Have the fleas arrived for the sandpit, Mr Georgiades?' A pause as we registered the astonished looks of browsing customers, then 'Yes, I have them ready in a box in the corner'. Sitting by the pond one day was Tony Hancock, gazing into the water.

Win His Blue

In a narrow mews off Gloucester Road and in perfect sunshine, Sir Richard Branson unveiled an English Heritage plaque at the former home of Group Captain Sir Douglas Bader DSO DFC, he resident there from 1955 to 1982. In a recent publication devoted to heroes - Nelson, Wellington, Churchill, Drake - nine pages are given to Bader, his example carried on by The Douglas Bader Foundation. In June the Telegraph gave away the Bader movie, Kenneth More in the lead he said was his best ever. Having met both, Moore was Bader, the perfect match, the fit of the uniform, the walk, the pipe clenched, the fighter pilot par excellence.



Lots Of Washing

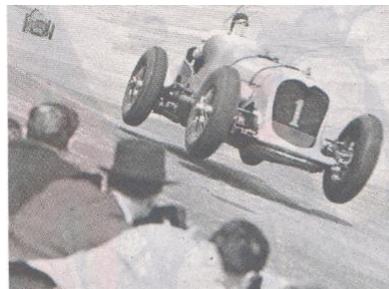
Here we have the pride of Gresley's LNER on a 70ft x 30ft model layout somewhere in the Midlands. Of special interest is No 2512 Silver Fox which hauled the lightweight Silver Jubilee whose silver-grey carriages in rexine were joined by rubber sheeting to give a smooth exterior and were washed before each trip between Kings Cross and the North. The blue A4 handled the two-tone blue Coronation



set while the green locos were in charge of the famous LNER teaks. Lots of action these days in model railways, British Railway Modelling the perfect news source each month. Now being restored is the beavertail observation car inspired by Bugatti, which ran with the Coronation set. Pace with grace in the 1930s, the golden age had vanished by 1940.

Cracking On!

Close-up 1930s style with John Cobb in the 12-cylinder Napier Railton. The fur broker gets all wheels well clear of the concrete as the silver Brooklands record holder leads the pack at the Surrey speed-bowl. Arranged in blocks of 4 cylinders in a broad arrow configuration, the big Napier 12 is comparable with the Merlin of similar size and was seen in a variety of aeroplanes, boats and cars. A few were supercharged for use in racing boats.



Treasure Awaits

Talking books at Raynes Park MAC recently, the whereabouts of London's Cecil Court was raised. To the east of Covent Garden (Leicester Square tube) bookshops side by side are crammed into the Court, almost thirty in number. All is there: Boy's Own, Biggles, Dick Barton, Bond, Magnet, Wizard, Eagle, Scout Annuals and so on. Founded fifty years ago Motor Books (0207 240 9845) also stock books on aviation, railways, boats and army matters.

Lathe Matters

In France and in search of Bugattis after the war, Briggs Cunningham was told that a fridge or two would swing the deal. In the UK kits were on sale for DIY freezers. Lathes too were rare and expensive, and more than one modeller made his own. Turn to the Aeromodeller for November 1946 and there we find, a page by Mr B Winterburn, drawings too, on how he did it. Perfect for turning up wheels, spinners, even soft metal items, apart from bearings (steel tube, bike parts) the whole tabletop machine was made of wood. A nice modelling project in itself.

Powerhouse

With teardrop top removed 5ccs of Jena twin are revealed. Ripping stuff! But how sad that the age of the tethered car in Britain resides in the memory of wrinklys and surviving magazines of the time. Slick tracks exist abroad, the best able to handle tethered cars cracking round at 170mph and more. Here there is nothing in that league. For obvious reasons proper track would have to be centrally placed, nearish to other noise makers, utterly safe when in use and secure when not. Bring back the twin brother of control line flying!



High Standards

Having reported on Jack's Place (S&T No 31) I visited Vale Road in Royal Tunbridge Wells to see The Aviation Bookshop as it is today. Rest assured that Simon Watson and his team now run a magnificent establishment: signed books by the score and more, shelves of combat material unique to the UK, stunning rarities (original Biggles and jems from the 1930s), a section devoted to aeromodelling books, any question answered with authority. Good deals too: Sunbeam Aero Engines at £40 reduced to £15. Was I pleased? An elementary question, my dear Watson. Five minutes from the station and on the blower it's 01892 539284.

Down here in Dorset four of us have got together in 2009 to run several competitions aimed at those who live in Dorset, Wiltshire, Somerset, Hampshire, Somerset. The comps involve electric gliding, open glider, thermal but also a Tomboy comp. Whilst called Wessex League really anyone from anywhere can join in if they have a qualifying model and are prepared to travel or indeed are on holiday at the time of a comp and would like to break the tedium of being away by joining in for one day. The gliding events are great fun and I join in with the Electric 600RES run by Chris. In fact it is almost the same as a Tomboy comp but different model. Anyway here are a few lines etc from Chris Hague regarding Tomboys.



WESSEX TOMBOY LEAGUE 2009 from Chris Hague

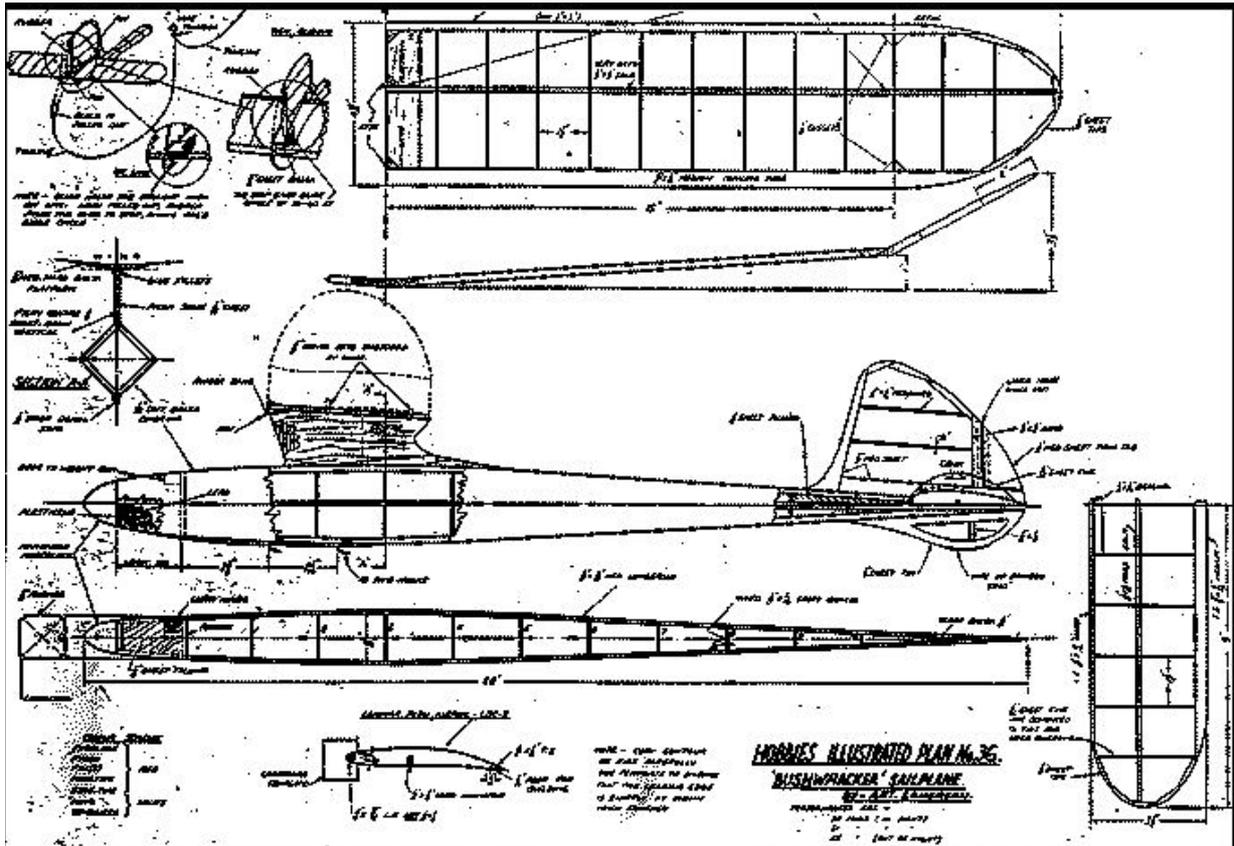
Scores after Round 4 held at WIMBORNE MAC Cashmoor site on Saturday 4 July 2009

The fourth round of the Wessex Tomboy League was held by kind invitation of the Wimborne MAC at their Cashmoor site on Saturday 4 July. Weather conditions were ideal with the wind coming from the south west and plenty of cloud cover. Both the 36" and 48" Tomboys fly well in these conditions. Two flights of four minutes or more were required to qualify for the fly-off and this time was easily achieved by most entrants. In both the 36" and 48" span Tomboy fly-offs Tom Airey's high climbing models were unbeatable. Tom uses the MP Jet 040 motor very successfully in the 36" Tomboy. However, James Parry convincingly out flew both John Taylor (the winner of the previous round) and Chris Hague. Entering the 48" span Tomboy Senior class for the first time Phil Beard, was just able to out-fly Chris Hague to claim second place. Congratulations to Tom on both his wins. Tom now has a maximum score of 40 points in the Wessex Tomboy Senior class, however the smaller Tomboy class is still open to some good results from other pilots to challenge for the overall win. A modified starting system was tried for this event and although greeted with some initial reserve (heard that before!) it was universally acclaimed as a step forward and will be used in subsequent Wessex Tomboy events. No change has been made to the first phases of the starting format in that the sequence of 90 seconds to start the engine and 10 seconds warning to complete fuel top-up is given and remains the same. Now, as before, no more fuel is allowed to be added and a "HOLD" sign is shown and at this point all pilots stand ready to launch and when the starter can see that everyone is set and ready to launch he shows the "GO" sign – and we all launch. Simple. In practice it took less than 8 seconds for all pilots to be ready. There are two big advantages to this system:

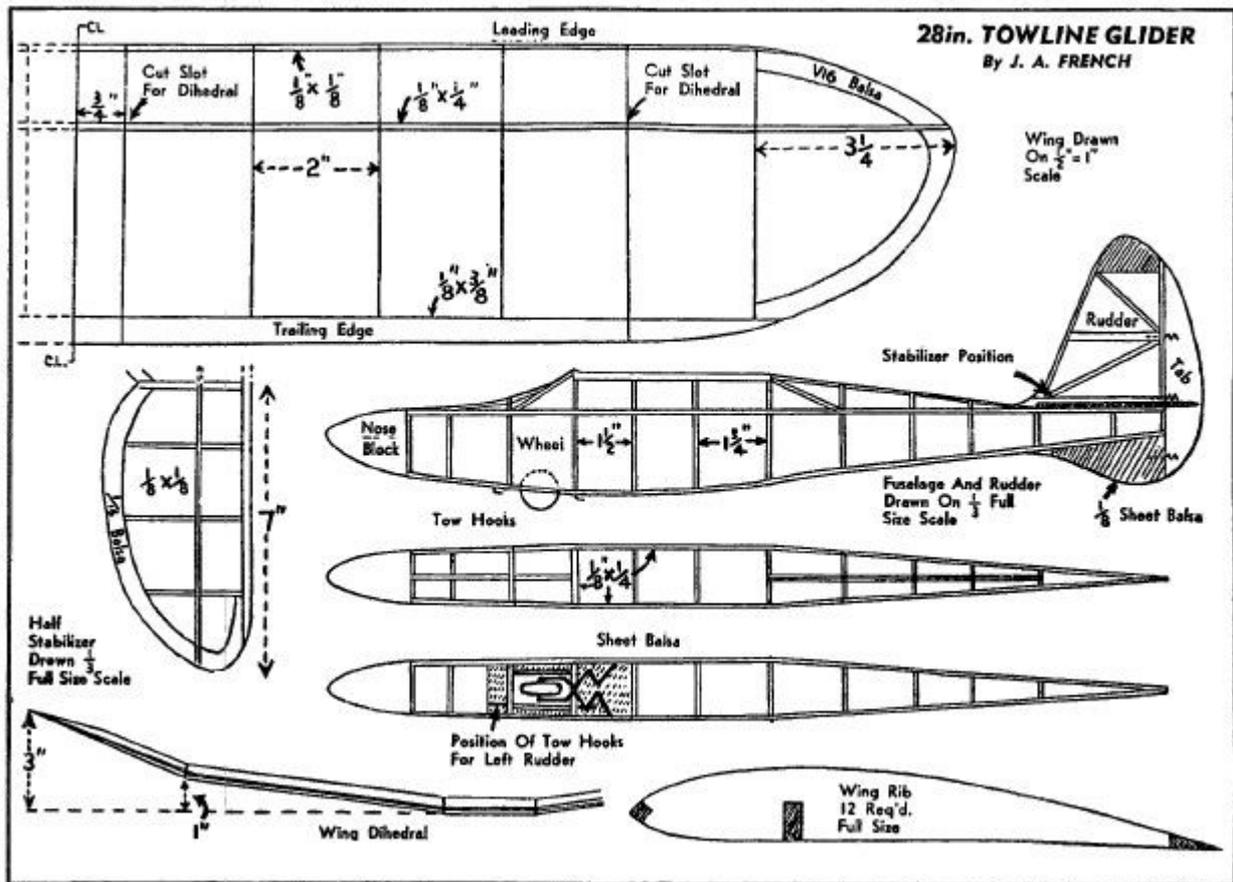
1. Pilots avoid the last minute rush of fuelling and launching. They are, therefore, more "settled" for the mass launch and hence it is safer.
2. On days when the lift is good and the Tomboy 36" span models are climbing to an enormous height (almost, or even out of sight on a good day, please don't ask how I know!) the start may be delayed for a period of time (to be decided on the day) to "burn off" some fuel before launching and so reduce the overall height gained.

Wessex Tomboy 36" span

		Round	1	2	3	4	5	Total
1	Tom Airey		9	10	7	10		36
3	James Parry		7	8	6	9		30
2	Chris Hague		8	9	5	7		29



Hobbies Illustrated plan No36 Bushwacker Sailplane

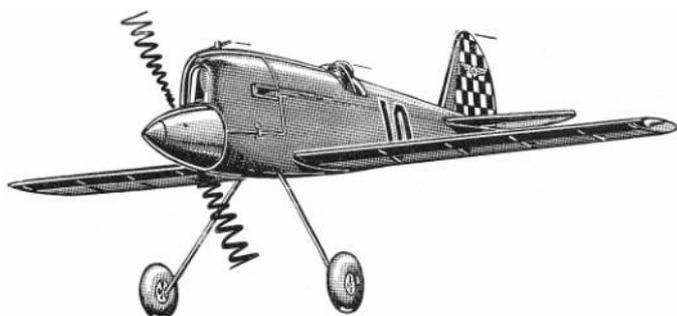


From Peter Renggli in Switzerland

Here is the Invitation for our Meeting every Year. I'm very busy with the preparations of all the little things needed. This Picture shows the "Knilch" of my son Christoph Renggli. 43 Years old and already influenced by the Antic Virus ! Its a beautiful little Darling and flies like a Dream, you know. Mills 1.3 / 10ccm Thin sheet Tank/ 620 Gramms / Covered with chemical coloured red silk / fuel proofer doped
The Mills needed a lot of Work included a new conrod/ Spraybar (refreshing British thread) etc. but now it runs well.

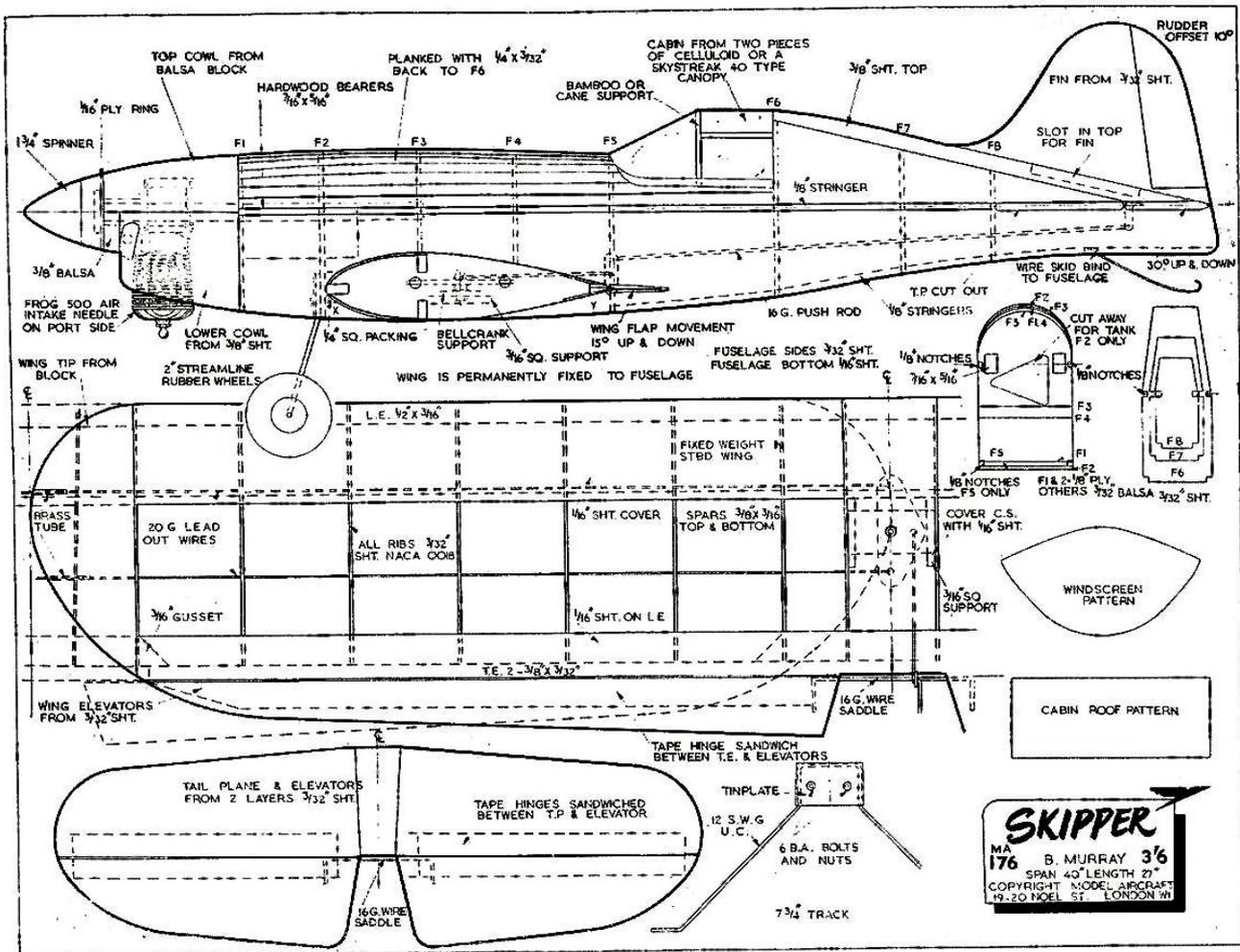


Having seen all the photos and DVD that Peter has very kindly sent me the last two years this event would be well worth attending. The photos he takes all end up in S&T but it would be nicer to attend. Check the website for details, sort out passport and get packing your car.



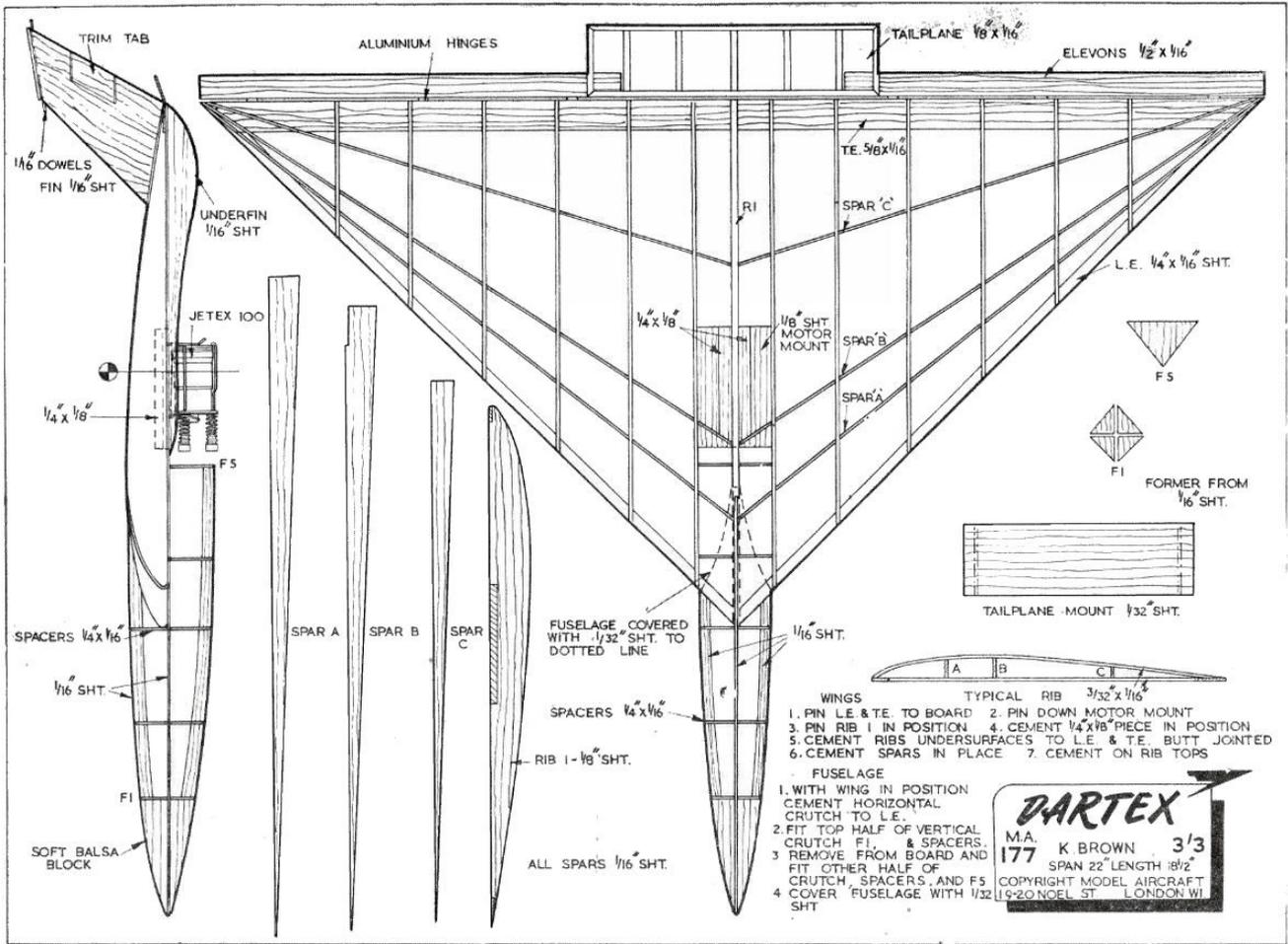
Middle Wallop this Bank Holiday weekend 29, 30 and 31 August

Not sure why I'm bothering to mention as this will be attended by all serious aeromodellers at least one of the days if not all three. If the weather is good then there will be three days of fantastic free flight with the addition on the Sunday of RC assist and control line. Several people have mentioned it clashes with the Nationals at Barkston Heath, well of course it is not a clash as MW will be the superior meet. Anyone considering going to Barkston instead must consider the immortal words of John McEnroe "You cannot be serious".

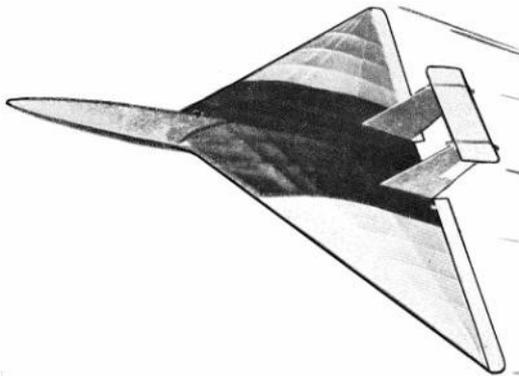


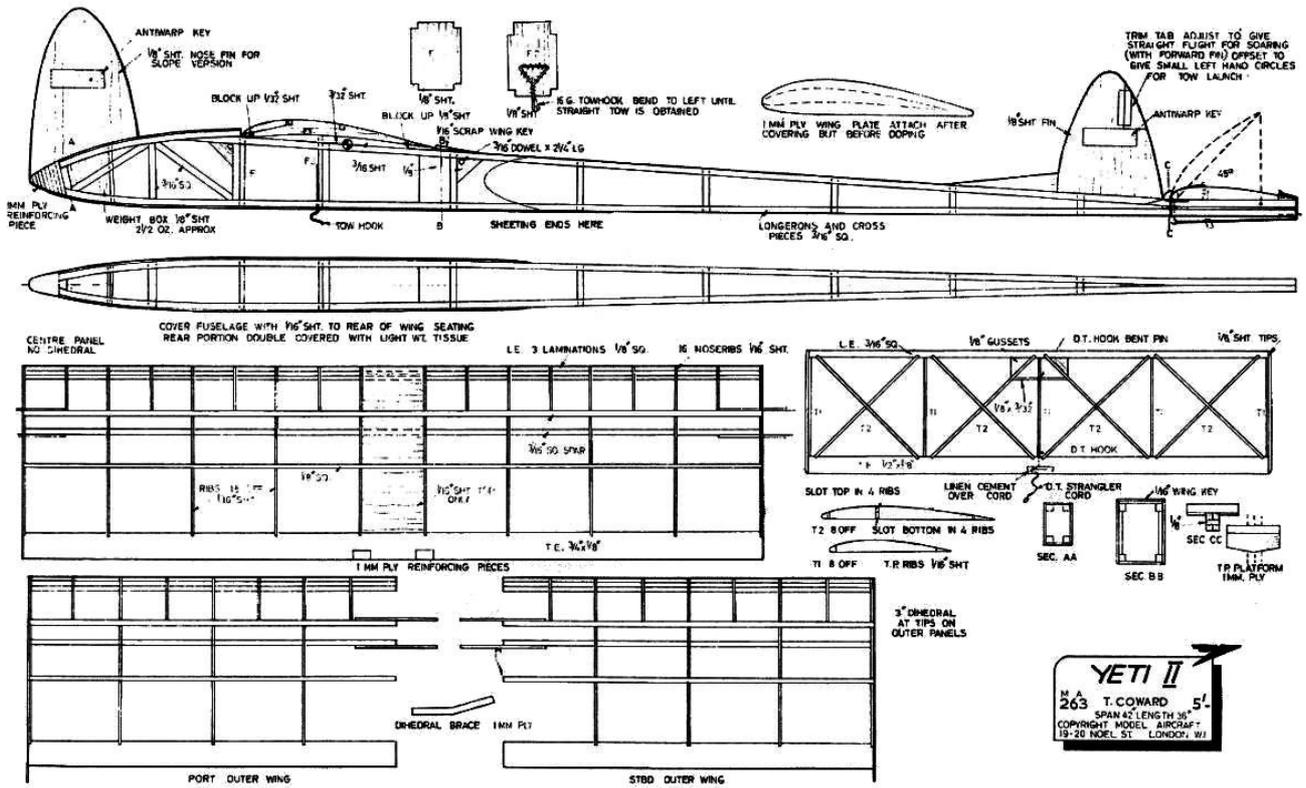
Skipper by B Murray "A snappy flapped stunt C/L model for .5cc engines"
 Model Aircraft March 1954





Dartex by K Brown for Jetex 100. March 1954





A/1 glider Yeti 2 by T Coward at 42" span for towing or slope soaring, nose fin if latter. October 1957

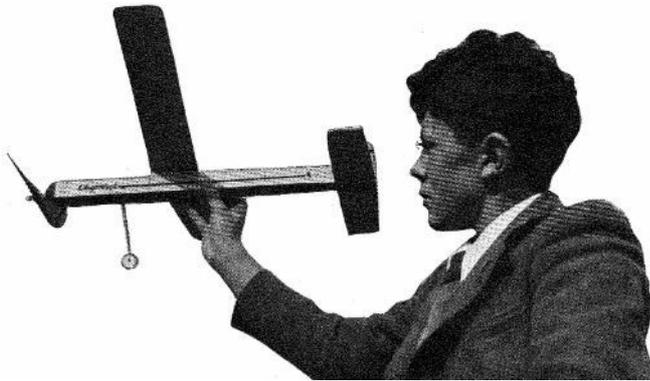
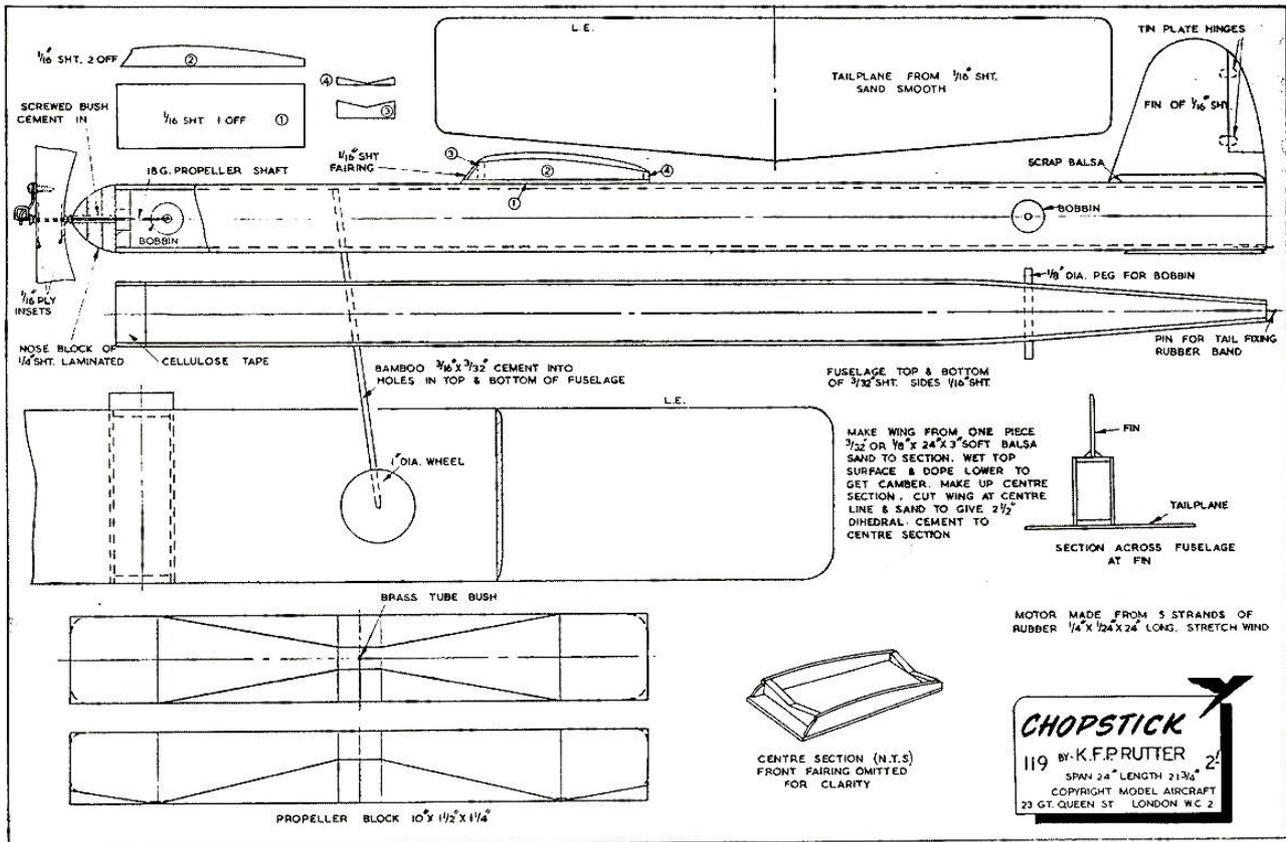


Cocklebarrow Sunday 16 August and Old School Model Aircraft Factory

Following the event it was found that a couple of the plans were duff and undersized by 20 mm. Derek on checking realised they were from a batch of 3 plans he had copied on the previous Friday. So if you bought a Tomboy Senior at Cocklebarrow please check the plan, it is easy as there is a 300mm line drawn on it. If the line is not 300mm long then phone Derek on 020 8647 1033 and he will immediately replace.

On a positive note Chris Hague had the first flight of Derek's electric Tomboy and despite the wind it flew well. The electric Tomboys are now available so if interested phone Derek.





Chopstick by Ken Rutter at 24" span described as a beginners rubber model.
If I made one I'd consider a Jedelsky wing.

You may recall last month I did bit of a tongue in cheek spoof about Jetex Motors and fuel. I did receive a few comments, mainly adverse and regarding the use of Guanidine Nitrate. I guess but could be shot down in flames again, that Guanidine is a word related to Guano and guano as we know is well you know what. One of the rich sources was not from an Australian mammal but from caves in which bats have inhabited for countless generations somewhere in the East. Anyway a few emails to Roger Simmonds and he very kindly sent me the following article, which has previously appeared in SAM speaks. Do also have a look at the Jetex website Jetex.org Just heard that there is a report of annoyed kangaroos bouncing around the outback clutching their backsides yelling "Ouch ouch ouch why did you go and try to light that for"?

ICI, Dr Hutchison's twopence-ha'penny cartridges and the Origins of Jetex

One of the first Jetex. patents was owned, not by Wilmot, Mansour & company (WM), but by ICI. It is interesting to note that this was granted to ICI after the original WM patent, and included details of a cardboard-bodied metal-capped motor, very similar to a Rapier in fact, that was never marketed. This has always been something of a puzzle, so it was with a real sense of anticipation that Andy

Blackwell and I visited the author of this patent, Dr Alex Cantlay Hutchison, who had originally been seconded to the explosives division of ICI in Ardeer, Scotland, during the War. In an extended interview, Alex was able to correct several misconceptions and inaccuracies in what could be called the authorised version of the Story of Jetex. He also had a collection of press cuttings that recorded the extraordinary interest the first public demonstrations of Jetex motors aroused.

Alex initially worked with James Taylor on rocket-powered torpedoes, and on gas producing power cartridges that had been used, amongst other things, to start aircraft engines. As to the beginnings of what became Jetex, Alex recalls:

The propellants we had, cordite, nitro-cellulose, things like that, were not suitable for rockets. They were too short burning; giving a PUNCH, rather than a prolonged force. So we looked for something that releases energy more slowly, but still giving good thrust, and that's why we went to work on Ammonium Nitrate with a variety of additives. That was James Taylor's work. He had gone on up the ladder before we came to Jetex and I was running the show myself. We were thinking, what can we do with some of the ideas we developed during the war for commercial industrial purposes?

We tried to find propellant substances that would not be classified as explosives, so I started working on Guanidine Nitrate (GN) instead of Ammonium Nitrate. I discovered that by adding dinitro phenol with a catalyst I could get a very slow but complete reaction turning the GN into gaseous substances, mostly water, CO₂ and nitrogen. Instead of getting a cartridge that went bang, we had a cartridge that went .WOOSH. By 1947, we were thinking of putting small [cardboard bodied] cartridges into toys, and had tested model aeroplanes with these. They were so good we started looking for somebody who might market the cartridges that we were proposing to manufacture. That's when we stumbled into Wilmot & Mansour, who were looking for something to go in their metallic re-usable motors.

We invited Joe Mansour to come up and see what we had, and arranged for him to meet one of the schoolboys we knew had a good glider, which was very well balanced and glided beautifully. When we put a cartridge into it, it really was impressive. So I said this is what we should show Joe Mansour. I took him out onto the golf course. He was very impressed indeed, and he said to the boy, I'll give you £5 for it. The boy was amazed, five pounds in those days was at least £200 now. It was sold on the spot, and Joe Mansour went back home with the glider and a pocket full of cardboard cartridges. This was the beginning of their fruitful collaboration. Alex recollects the impression Joe Mansour made: He was very untidy, a real inventor type, and [would always] have a cigarette between his lips that would burn down depositing the ash down his front as it burned. One time we were flying aeroplanes at the golf course (my house was in a street that ran parallel to the golf course) and one that we let off was going particularly well, rising way up and over the course and disappeared over the houses. So Joe and myself went along the street pressing the bell of each house, asking, "Please can we come in and look in your garden for our aeroplane?" . It took a long time to live that down with the neighbours!

We still hadn't at that stage decided whether we would continue to try to sell the cardboard cartridges, or supply pellets that Joe Mansour might insert in his aluminium motor. Eventually we decided his idea was much better, and it would be simpler for us to make just the pellets. Through late 46 and through 47, we worked to find out what size of pellet and so on (what thrust) while Mansour worked on how to make [the metal motors]. By 1948, Mansour was arranging for production and we were arranging for production. We had a whole range of the Power Cartridges that we thought we might demonstrate to industry in general, saying, this is something you should be interested in and follow up. The press came in great numbers to see what was on show, but when they discovered there was a small cartridge that was going to propel a model aeroplane, they all flung themselves at this, and that stole the show! Absolutely, the press coverage the next day was terrific, but it was all jet cartridges for toys! The Express, the Times, all the major papers carried good reports on, not Jetex, because it had no name at that time, but what was called, .Dr Hutchison's twopence-ha'penny cartridge. Jetex did arrange their own demonstration later in 1948, of course, that had a much wider coverage in the model press. And the rest is history. I do not think the Power Cartridges as such were much of a commercial success, but ICI did produce

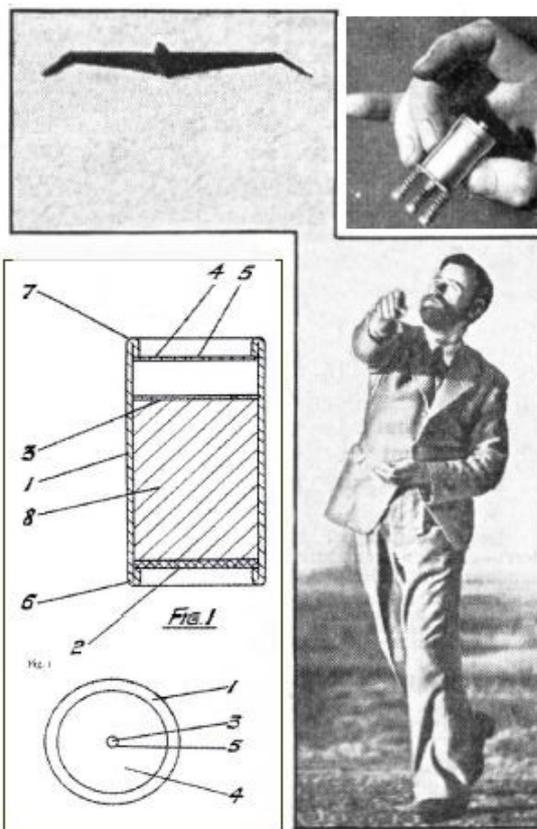
Jetex pellets to Dr Hutchison's specification (which also covered the "Red Spot" formulations) until 1957. Alex knows no reason why the prices were increased so greatly in the mid-fifties.

The ICI motor (or cartridge) (below right) had a specification similar to a Rapier L3: 21-28g thrust for 15 seconds, but, unlike Rapiers, there was a safety device, the metal cap was designed to pop out. If the internal pressure went above about 4 atmospheres. As to that puzzling second ICI patent, Alex explains: .When WM brought their patent out [lodged Nov 1947] they wanted to know if they could patent the cardboard motor as well. I said that was already being used by ourselves at ICI before we knew them. Mansour then said, if we can't get a patent to protect our own interests, will you patent it, because you obviously are the people who used it first? So that's why we brought out this patent [lodged March 1948] behind the Jetex patent, to protect WM. Once we'd tied up with WM, we stopped our interest in cartridges. I hope the above edited extracts of our interview convey Alex's enthusiasm and the pleasure he still feels in his achievements. Alex also discussed other important matters . propellant chemistry, his later research, rocket-propelled motorbikes! . and a more extensive text will be published on the *Jetex.org* website. In conclusion, I must thank Alex for so graciously sharing his reminiscences with us, to John Hartley-Hutchison for arranging the interview and copying the press cuttings, and to Andy Blackwell for his meticulous preparation of the transcript.

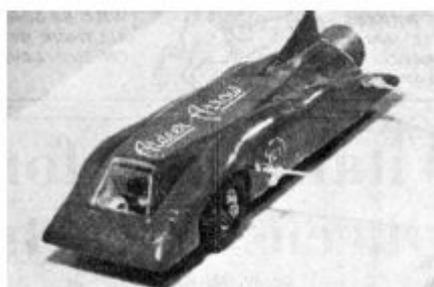
Illustrations from press reports published 13 March 1948.

Top right: the first known photo of the Jetex 100. Alex doesn't know who the bearded gentleman launching the tailless model is. Middle right:

The tailless FF model is the right way up here - either the model was very unstable or the action shot was faked!



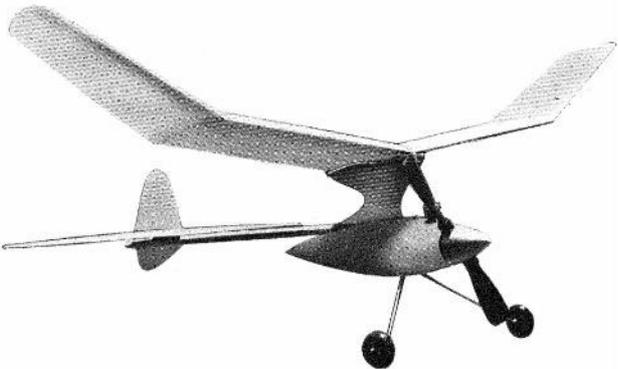
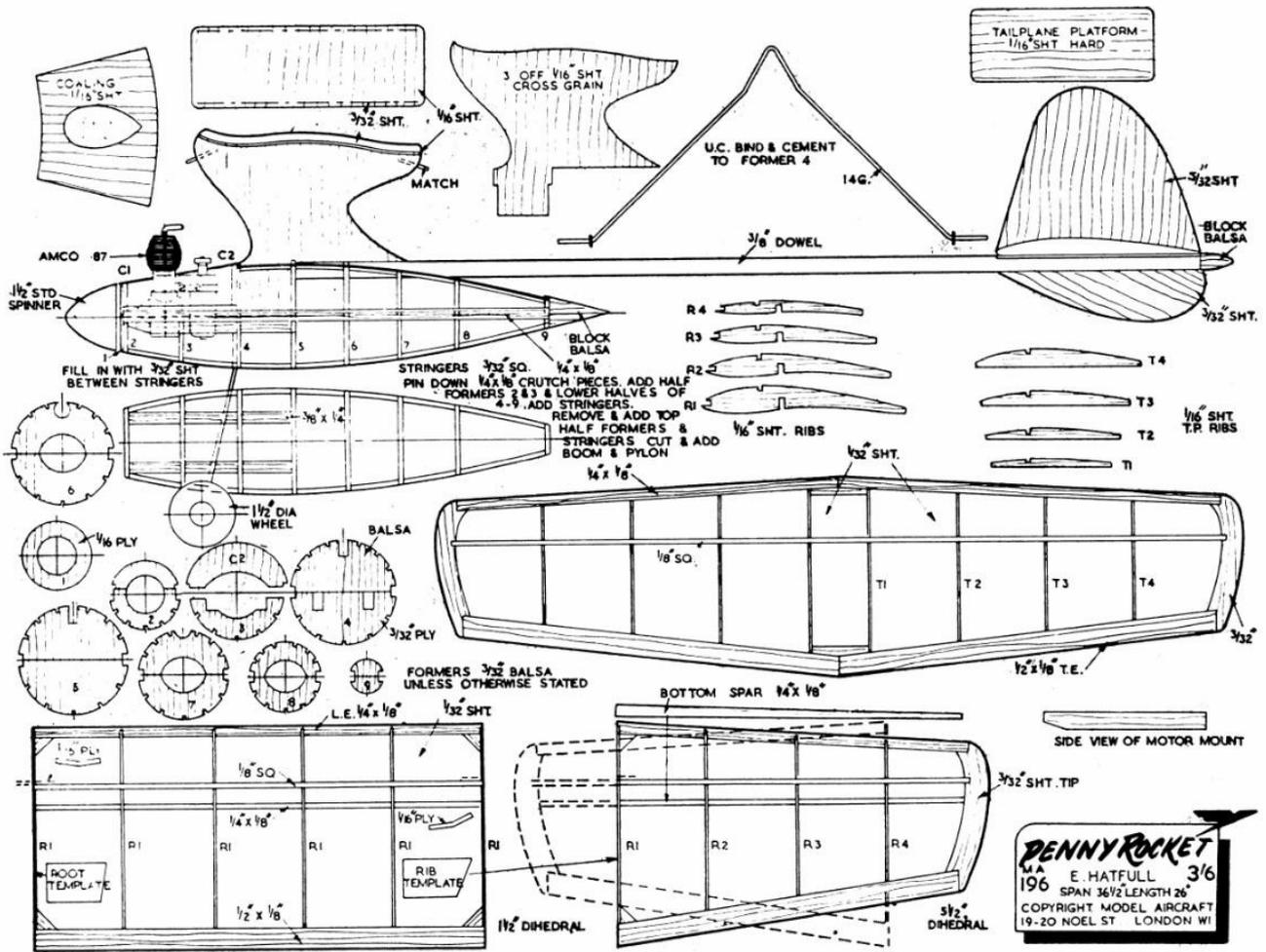
Was this the original schoolboy's glider, now (over) powered by a Jetex 100, not an ICI cartridge?



<<<<<<<The RTP car was known as the Ardeer Arrow

ICI's display. >>>>>>>
Note the familiar Hydrojet and RTP plane.



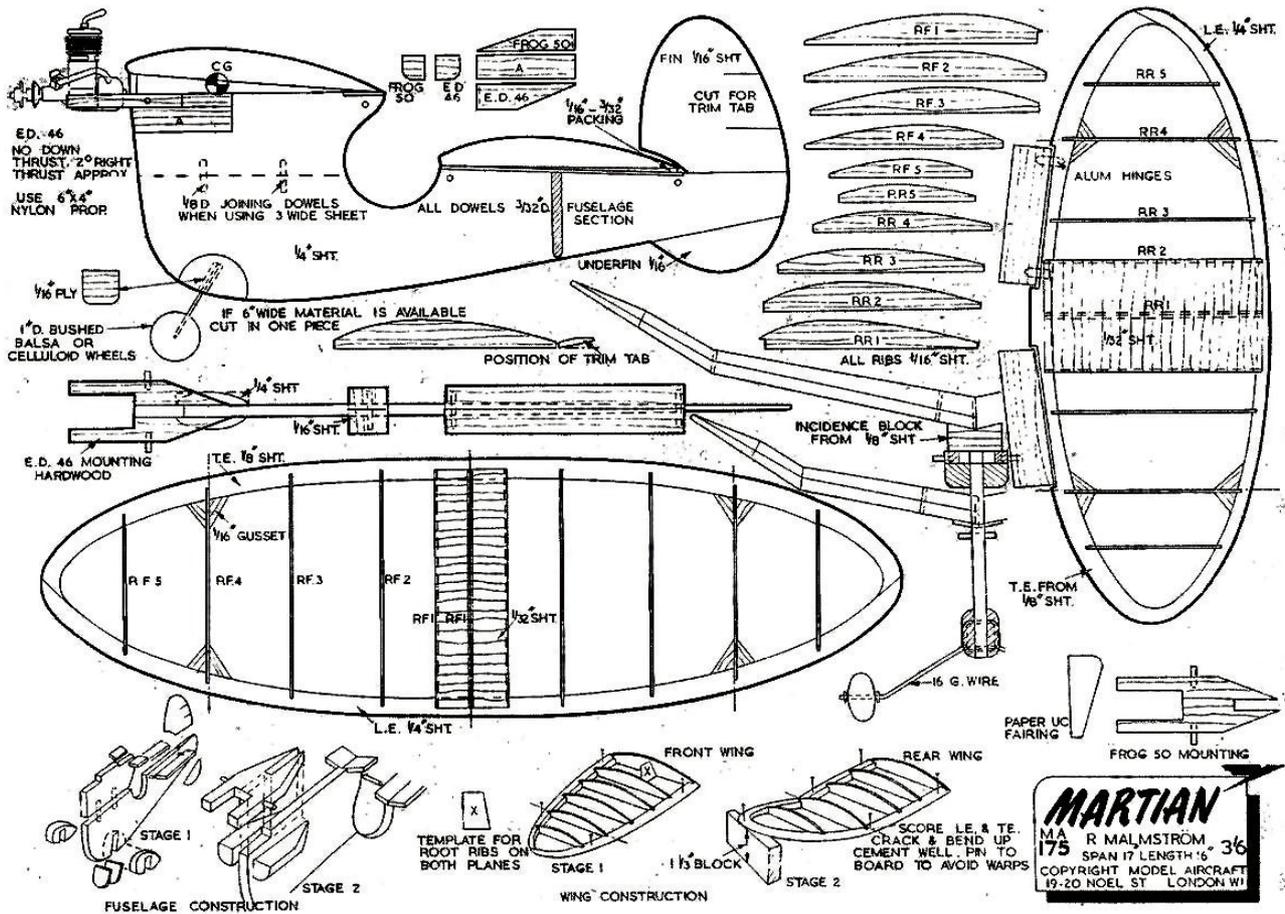


A E Hatfull design 36 1/2" span with AMCO 87, October 1954.

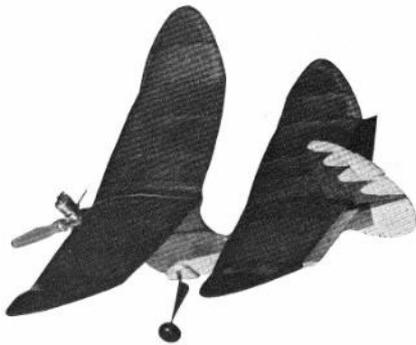


Received from Darcy Whyte of Ottawa

I have a cool model airplane design at <http://www.rubber-power.com/fly-it.htm>
 You are most welcome to mention it or review it. Darcy Whyte



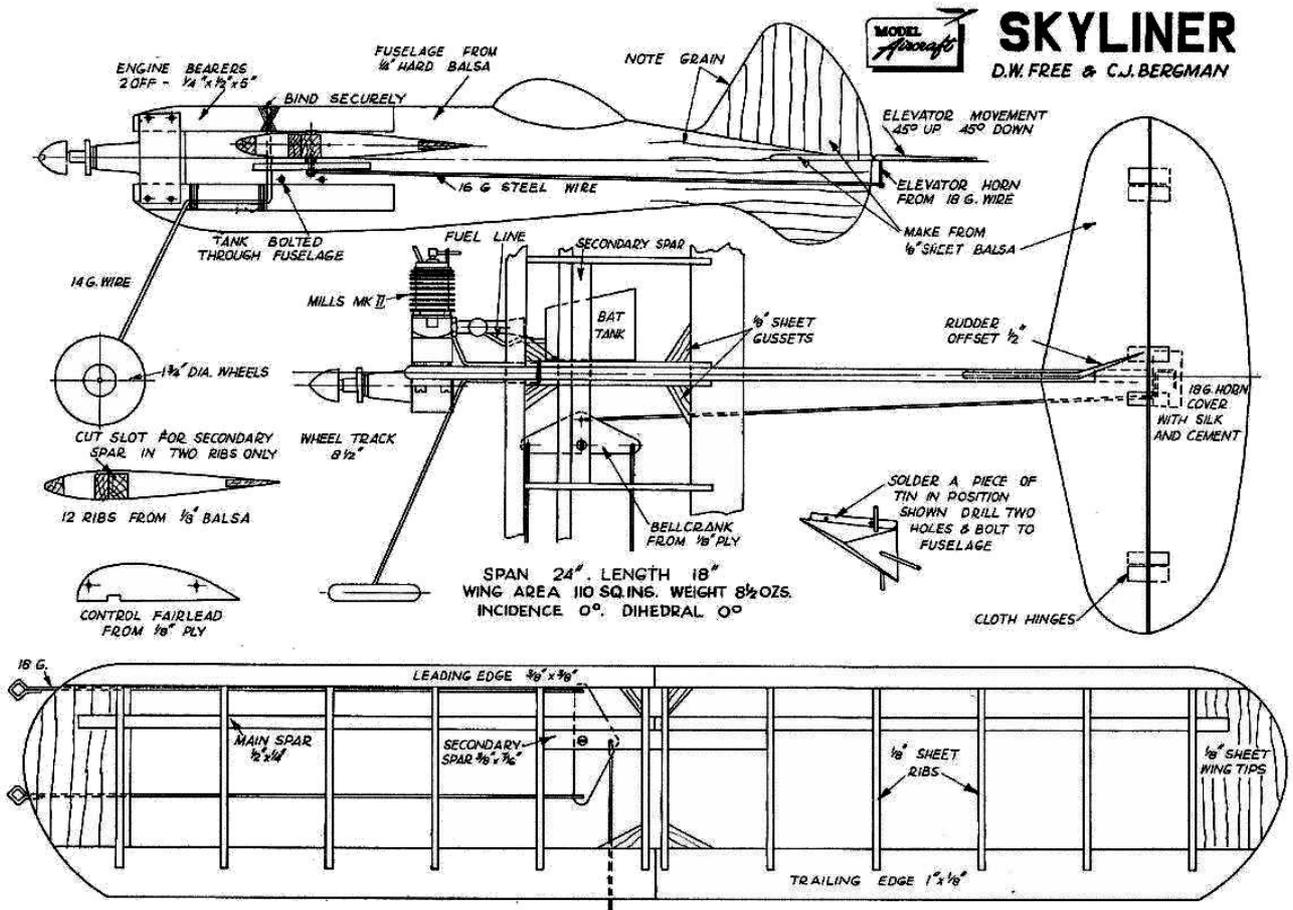
Ray Malmstrom's Martian tandem wing model for Frog 50 or ED.46. Span 17". February 1954 Model Aircraft.



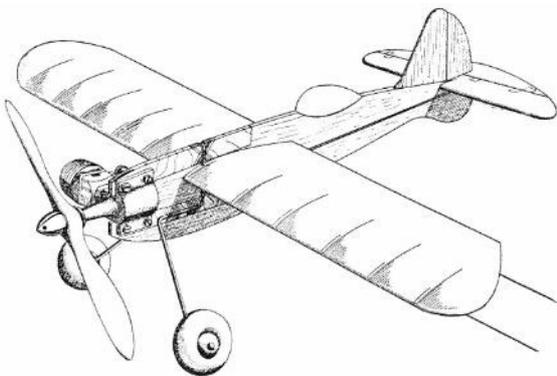
From Geoff Goldsmith

Hi James, I saw this in the museum at Tangmere this week, it may be of interest as there has been talk in speaks re these.
 On another subject I found in a barn a box of engines including a Milford Mite, it runs and Dick Roberts is going to report on it in the next two speaks.(also was a nice Ohlsson 60!)
(Lucky Geoff I hope we get to see these engines preferably in models)





Skyliner a beginners control line stunt model by D W Free and C J Bergman for Mills 1.3. February 1950



Chesil Club meet Saturday 15.8.2009

Chesil Club 's flying site is just North of Bridport at Pymore and is shared with fullsize. Last years meet was washed and blown away but this year things were a bit kinder. Still mainly overcast with a crosswind and rain to begin with which thankfully died away. There was a mixture of models including many scale and ARTF's the former being of the large size, one the Oxford weighing in at 45 Kg. Here are some photos of the scale models, which may be of interest?







It could have been worse, no damage though



Full size chopper coming in for a visit



Full size Tiggy up on a visit from Devon

From Brian Austin



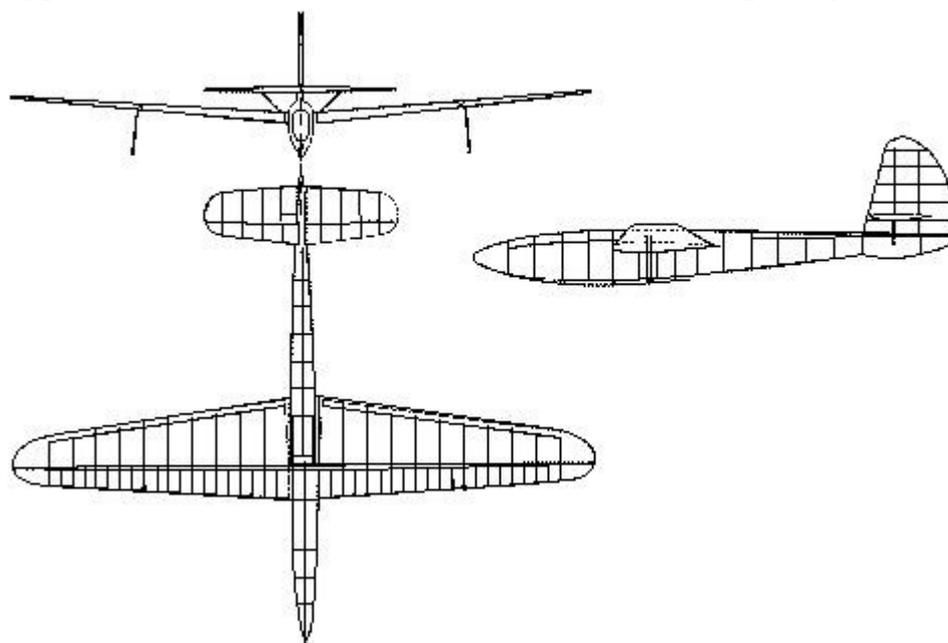
Couple of pictures of the Tomboy Senior that I have just completed, as I know you are always looking for bits for S&T mag. Has a CS Mills 1.3 in it, sadly I will not



Last month or was it longer ago I made reference to the Sopwith Kingston upon Thames factory now being flats and Sainsburys amongst other things well it just so happened that Thursday 20 August I was on my way home and happened to pass the old place. So knowing how popular scale versions of Sopwith and Hawker designs are I thought I'd take a couple of snaps of part of the site and here are the photos for anyone remotely interested.



Slingsby Type P19 built for FROG from Mike Cummings Raynes Park MAC



Slingsby Sailplanes Ltd designed and built a series of small pilotless towed-target gliders under this type number. There were three types, namely B1, B2 and B3, it is not certain what the differences were between each type. The drawing above was constructed from detail drawings entitled Type 19 only with no further identification. Wing span: 4.88 m., 16' 0". Length: 3.99 m., 13' 1 1/4".

Wing area: 2.92 sq.m., 31.4 sq_ft. Aspect ratio: 8.15.

Wing section: Symmetrical, with 5 degrees of dihedral.

Undercarriage type: Central skid, plus a skid under each wing.

Weights and wing loading: No details discovered. Wooden construction. Speeds: Towing, 402 km/h., 250 m.p.h.

The targets were built in 1943, for the International Model Aircraft Company for Naval experiments. The International Model Aircraft Ltd., of Merton, Surrey, and Lines Bros. Ltd., built a towed target glider known as the 16-ft. T.G. Mk. 1, and also a 32-ft. T.G. Mk. 2, during the war.

Cocklebarrow Farm Vintage and Tomboys Sunday 16 August 2009 by Tony Tomlin.

August 16th saw the second of the three, popular R/C vintage meetings, for 2009, held at Cocklebarrow Farm in the Cotswolds. The overall running of the event was by Val and Paul Howkins and involves, on the day, running the very efficient frequency control and a myriad of other tasks including safety tapes for the flight line and car parking etc. The event also hosted the eighth round of the ten Tomboy 3s and Tomboy Senior competitions held this year, on this occasion run by Tony and Pam Tomlin.

The sport flying started early as a number of people had camped overnight, but the car park soon started filling up, such is the keenness of fliers to attend this meeting. Ultimately 45 fliers signed on with around 75 models. Weather wise there was variable cloud cover and a fairly stiff SW breeze. This made landing difficult with a fair amount of curl over and general turbulence from the Cotswold stonewalls surrounding the site. Unfortunately this left a good number of models unflown during the day. The larger models, such as John Lairds 3X Mamselle and the PB 2 of Garth Pierce, seemed to handle the gusts well, as did the Majestic Major of Nick Skyrme and the PB of Ian Andrews. Mervyn Tilbury, as always, had an interesting selection of models, and his 1.5x Popsie flew well. John Bowring was flying his electric Super Scorpion that made light of the conditions and a new visitor to Cocklebarrow was Neil Tidy, of Laser Engines, flying a Majestic Major.

Tomboy 3s

The competition for 36" span, Vic Smeed Tomboys, powered by Mills .75 engines, was well supported, considering the gusty wind. Some faces were missing, including winner of the last meeting at Old Warden, Tom Airey, who was unwell. Derek Collins was unlucky in damaging his Tomboy on a trimming flight after hitting the field perimeter wall. The normal Tomboyists were flying with four of the 2009 round winners, Tony Tomlin, Derek Giles, Paul Netton and Chris Hague, well matched and David Boddington, Chris Giles, Brian Brundell all achieving good preliminary flights. James Parry who was flying in his first Tomboy3 event in 2009 made up the 8 starters.

A different starting system was tried at this meeting. It allowed the fliers, after lining up, 90 seconds to start their engines and to continue to top up with fuel until the end of the 90 second period. At this point there is a further 15 second delay, indicated by a '15' board held up by the starter, during which fuelling is not allowed. At the end of this time the board is rapidly lowered and the models are launched in the normal mass launch. This proved a great success with all models getting away together. The 15 secs 'hold' limiting the height reached by the models was appreciated by the competitors.

Nick Skyrme was the starter and with the gusty wind the first minute or so of the flyoff was exciting to watch. The competitors were all mindful of the fact that it is necessary to land within the field to be classified as a finisher. Some fliers climbed rapidly, with no forward penetration, whilst some kept the models down low by using large amounts of down elevator and penetrated well upwind. After a time a pattern developed, with Tony Tomlin upwind climbing in company with David Boddington, both close at around an estimated 700 ft with Brian Brundell and Chris Giles 200 feet lower. James Parry was already down with a short engine run followed by Chris Hague, also with engine problems, landing after 2 mins 15secs a little more than 1mins 50 secs longer than the unfortunate James. Brian Brundell and Chris Giles were unlucky, both unable to find lift with Brian down in 3 mins 15 secs followed by Chris, 15 seconds later

Paul Netton and Derek Giles were now both in trouble, Paul very high but having to dive to keep within the flying field. Derek was in worse trouble 'landing' heavily in an adjacent field with a fair amount of damage to his Tomboy. Paul luckily made it back to the field and claimed 3rd place with a time of 6 mins 32 secs with David Boddington landing smoothly 13 secs later. Tony Tomlin had 'parked' in lift upwind and was still at around 400ft. Tony ended his flight by diving in to land gently on the patch at 7 mins 34 secs, to a ripple of applause.

Tomboy Senior

With the exception of Paul Netton and Brian Brundell, the fliers in the Tomboy Senior Class were as in the earlier T3s. Also flying in this competition were Colin Shepherd, winner of the last round at Middle Wallop, and Mike Burke flying in his second Tomboy event. The wind was now gusting at around 18 mph, which was going to be challenging to the fliers with the larger 48" Tomboys, powered by the Mills 1.3s.

As Nick Skyrme lowered the start board, the models were launched as one, with some very close flying taking place. Tony Tomlin's Tomboy had picked up a huge gust and was diving vertically towards the field retaining wall, luckily being recovered in time, but now 200 ft.+ behind the others who were all having problems with penetration into the wind. It was a case of full down trim and, in some cases, full down elevator to achieve forward flight. After 2 mins 53 secs., Chris Giles was first down, after a dive onto the strip from 100ft. or so, with a lot of damage, possibly caused by turbulence. Mike Burke was doing well, landing safely 3 secs short of 4 mins, having not flown his Tomboy in these conditions before. Chris Hague was next to land after a short engine run at 4 mins 23 secs. Colin Shepherd and Tony Tomlin were close, with Tony only about 70ft above Colin, both models trying to push into the wind directly above the strip, and at times stationary. Colin landed first at 4 min 38 secs with Tony claiming 3rd spot eight seconds later. Derek Giles and David Boddington had managed to find decent lift and some good-natured banter was heard between the fliers as they descended. Derek's model had started to stall as it reached the ground turbulence and landed heavily at 6 mins 22 secs, with David landing smoothly on the strip at 6 secs over 7 minutes. Not the longest Tomboy Senior flyoff but certainly the most demanding!

The prize giving followed with the awards being presented by Val Howkins. Thanks must go Val, Paul and friends for the terrific amount of hard work that goes into making these meetings so popular and successful.



Garth Pearce



Hague and Parry (latter putting on dubious pose)



John Bowring's Super Scorpion

Cocklebarrow meeting

Thank goodness Tony wrote the article. Here are a few more photos.



Got my own back with this photo of Tony Tomlin. A remark along the lines of “do you know what you’re doing” got the perfect pose.





Neil Tidey and Derek Foxwell





Curiously Neil Tidey's Majestic Major is powered by a Laser! Who'd believe it?



Stukanezer and Juniorezer

Tomboy 3 (National) League placings to date, 16 August 2009, supplied by TT

1 st	Tom Airey	86	14 th	Derek Giles	18
2 nd	Tony Tomlin	70		John Bourne	18
3 rd	Stephen Powell	68	16 th	R Preston	16
	Paul Netton	68	17 th	John Taylor	14
5 th	Chris Hague	56		Chris Giles	14
6 th	David Boddington	52	19 th	C Shipway	10
7 th	Brian Austin	50	20 th	James Parry	4
8 th	John Strutt	44	21 st	John Wingate	2
9 th	Geoff Goldsmith	38		J Wheeler	2
10 th	Dave Stock	34		Dave Bishop	2
11 th	B Brundell	22		J Crabtree	2
12 th	Tony Overton	20			
	Geoff Stubbs	20			

From Brian Cox in France

Thanks for S&T every month, I really look forward to it, particularly David Kinsella's ramblings through our distant memories. I get frustrated by always wanting to add bits to David's coverage of our cultural spectrum... but he tells it so well...

I was also impressed by Ken Croft's presentation of his own engine production... Wow! It sure beats pretending that yer latest far-eastern engine is a Mills...

Here, in the middle of France, I only fly vintage RC, CL and FF, and I'm attaching a few photos of three of my current fleet. There are quite a few more to follow... perhaps in a few months' time...

Sorry there aren't any flying shots (yet...). This is because I usually fly on my own, except for CL of course, and these photos were originally taken just to enable me to look at my models without actually digging them out and assembling them...





The models obviously reflect my own tastes, particularly flying nice old engines on wooden props, and I'm still totally hooked on tissue covering. Even the cat doesn't hang around too long when she thinks she can smell dope... The Simplex is entirely covered in lightweight Modelspan, including the Trexler wheel hubs, just adding layers as a function of strength required. The wing centre section has four or five (or six!) layers of tissue, well doped, and remains undamaged by many applications of very strong rubber bands.

The Simplex plan was obtained many years ago from Keith Harris. If Keith sees this, at least he'll know that the many superb plans

he's supplied over the years are actually being built...

The Pirate was built from a Ben Buckle kit, the quality of which was really excellent. The engine was built by Mills Bros. of London, and the quality of that ain't bad either!

My attempt to build an Ajax started with an early Amerang KK kit. This was probably the worst kit



I've ever purchased, in more than 60 years... The wood was so hard and heavy (unusable), and the person who wrote the instructions had obviously never been within half a mile of a rubber model. It certainly wouldn't have been possible to produce a successful model from the kit. In fact, I was really annoyed that such



mediocrity should be marketed using the name of Keil Kraft. Fortunately, a phone call to Keith Harris resulted in the rapid delivery of an excellent copy of an early

Ajax plan (and an Achilles!), so the model was eventually built, more or less to my satisfaction, with only the wing mounting system slightly modified.

Interesting item from Jennings Holt

We flew models till way after dark this evening (*email dated 17.8.2009 JP*)...my friend has a string of the LED Christmas lights taped around the wing of his SolStik electric model...it is easy enough to see while it is up in the air, but tricky to land because he didn't have a 'flarepath' to see where the ground was...the LEDs shine on the ground about 3' below the model, though...when he put all the stuff away, I noticed the LEDs light up when he held a radio close to it while putting it away and asked if he still had the Tx on, which he did...so I had him extend the antenna and turn it on again, and the LEDs lit up again...the diodes act like a 'crystal set'...I had him try all his Tx out to see if it would work as a 'field strength meter'...and all on 72 MHz made the LEDs work...only the high frequency 2.4 GigaHertz Tx wouldn't do so...let me know if anyone has done the same with the 35-40 MHz radios...there is a 'ButterFly' ready built model that one of the others has that came with LEDs already installed inside the wing to make the covering light up...it was setting on a tailgate of a vehicle that a rescue squad person uses, and it would make his Police Scanner act up while it was on...I didn't get to see what frequency the scanner stopped on when it acted up with the harmonic or overtone...so the LED system might even be made into a QRP HAM Rig with a key inserted into the circuit...Jennings...

I've included the following because I'm certain it will reflect sentiments held by many readers. I was struck by the content because I thought it was just the UK where we suffer the symptoms eloquently expressed.

Youth of today and model aircraft (or aircraft of any kind!) From Scott McGowin, North Carolina, USA

Just read your blurb on the kids showing interest in a model only as long as they could buy it and didn't have to put any effort into flying it and wanted to assure you that it is a phenomenon not restricted to your area.

There seems to be a complete disconnect between the youth of today and their hands/brains. (Well, I guess that's not true judging by the hand-eye coordination of the average Play Station addict)

The insistence on instant gratification and the resignation and capitulation following failure on the first attempt in all that they try is baffling to me. While I am fully aware that I am now of the "old" category having entered my 40's, I can still remember a wide selection of Comet and Guillow kits next to the more prolific plastic display models at the local department store. Now, even the plastic kits are gone.

But more pervasive than a loss of desire to build something, anything, is a complete lack of interest in aviation that has overtaken the youth and population as a whole here in the states. Airplanes are objects to be banned (if models), regulated out of existence (if light aircraft), or feared (if of the airline type). Our schools and news media spend so much time telling the populous that they should fear everything and everyone that it seems that we have all become a collection of sheep running away from one Border Collie to another.

As a child of the 70s and 80s I "dealt" with cutting out parts from print wood (using a razor sharp knife without adult supervision!!!), waiting for Ambroid glue to dry, and trying not to poke holes in the tissue covered parts. All as I finished my latest creation looking forward to experimenting with the trim of the model to get it to fly well. Today we have laser cutting, super glue, and radio controlled ARF models that cost not much more than the stick and tissue kits of "yesterday" and still the number of model aviation participants continue to drop. Winding a rubber motor was border line insulting to my son and his friends the last time I decided to fly one of my rubber models and I have even been asked to leave the room because my micro R/C helicopter was interfering with their Play Station concentration!

I live with the hope that this reduction in numbers will bottom out and reach a point where the few that will always wonder at the marvel flight will carry on as best they can, be it in model or full scale aviation. But we have to face the fact that aviation is fast approaching the time where it will be just one more paragraph resigned to the middle of some history book.

Now go fly something!

Follow up email

Thanks for suffering the rants of a disgruntled aviator. You'll get no objections to using any of my thoughts put to email but you may get plenty of dissenting opinions from your regular readers! And that can be a good thing.

No sooner than I hit send on the letter to you than I opened the latest issue of Flying Models (the best aero-modeling rag on this side of the pond!) and see photos of 2 very young modelers in Mr. Kruse's article. Maybe my cynicism is misplaced?

Nice looking old-timer. Reminds me of the Trenton Terror.

I seem to have run out of time to build the stick and sheet "proper" models. My last one, a twice size enlargement of the Comet Phantom Fury took almost a year to finish. And that was using laser cut parts! The 30's Navy color schemes are some of my favorites.

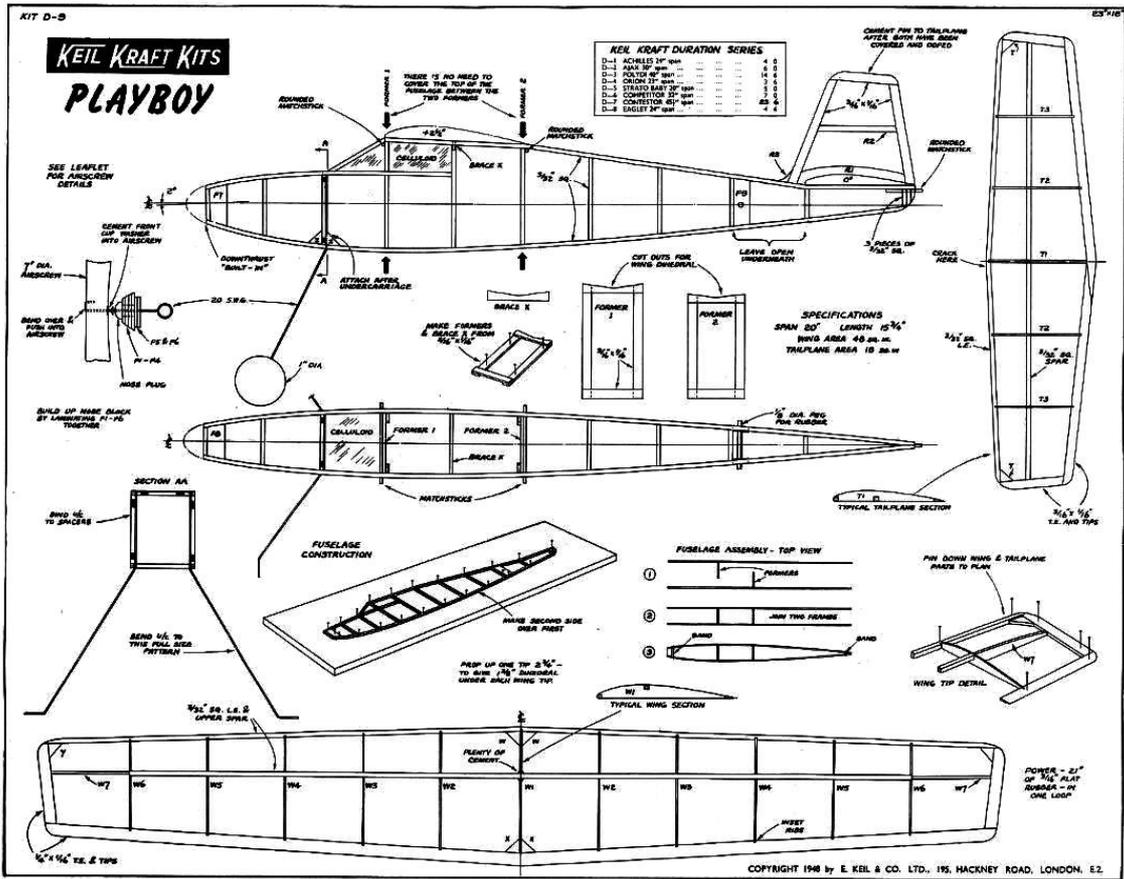
I've found that building from Depron sheet allows me a building fix and I still have time left over for sleep and all the other annoying things that seem to get in the way. As you can see from my email address I have a love affair with the R.A.F. BE2e and I was able to get a 1/12th scale 3 channel knocked out in three weeks using 3 and 6mm Depron! Ah the joys of CAD and the home computer. I'll send along a shot of each.



Annual Bournemouth Airshow 20 – 23 August 2009

Always something to look forward the free seafront airshow here are some poor photos.





Last of all a couple of photos from the club I belong to Wimborne MAC



David Taplin with his electric Frog.....

No its gone can't recall the name of the model, it's on the tip of my tongue. Two minutes ago I knew it!

I'm just about to email S&T so will recall when sent! Does anyone else go blank like that?



Ken Wyskor's Tomboy



David Ashenden's Utility



John Taylor's Miss Philadelphia IV, electric powered, built by F E Smith, and then passed on to David Baker and when his modelling goods were sold off acquired by John. The model is reduced in size to if I recall correctly 5 ft the original by Maxwell Bassett being around 8 ft with a Brown Junior. It flies very well indeed on rudder, elevator and motor.

For those that haven't already you may go to sleep now