Model Aeroplane Club
Founded in 1946 by Ray Malmström

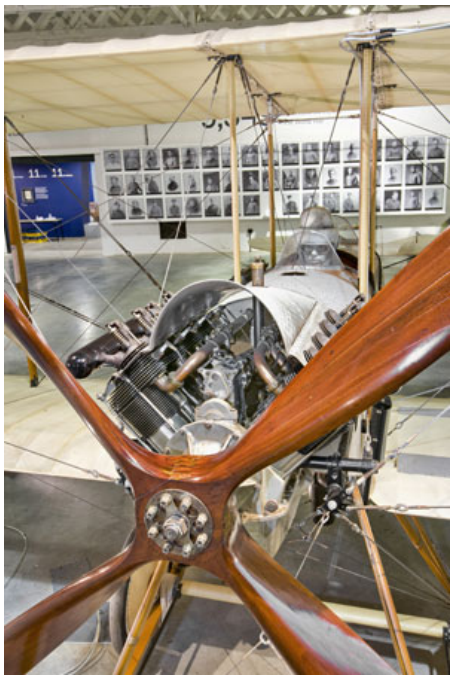
March 2015

Edited by Bryan Gostlow
Distributed by Tony Harper

RAF Museum, Hendon

7th of March 2015

Book your place with Margaret if you would like to join the 2015 visit to Hendon. There has been a rush of requests enabling the cost to be reduced just £15 - good news for all concerned! Leaving IVC 9am sharp. Leaving Hendon 4pm. Food available on site or bring your own.



Due to other activities at the College on Saturday 7th March would you all please park in the **playground**, the coach will pick us up at the entrance to the school.

First World War in the Air

from the Royal Air Force Museum website

Eleven years after the first powered flight, aviation emerged as a force capable of changing the face of battle. In 1914 the Royal Flying Corps numbered just 1,500 people. By 1918, when the Royal Air Force was created, this had grown to more than 205,000. The full strategic value of air power had become all too evident - both on the battlefield and on the Home Front.

This compelling story of the First World War in the Air is revealed in a brand new exhibition in the Claude Grahame-White Hangar, which is **open now** to the public.

A flea in your ear?

membership secretary Tony Harper *writes*

If you haven't paid your 2015 subscriptions then this will be the last newsletter you'll receive this year.

The Interview *with founder member* Ivan Foster

What tools would you not want to be without?
A couple of Perma-Grit Files and a rotary mat for cutting on are always on my work table, but more important than these items even would be my glasses. Without them I would be cutting my fingers rather than the balsa.

Do you have a favourite model, past or present?
An eight foot RC glider called "Zodiac" would have to be my favourite. I flew this both at Oakington airfield and at Impington. The Zodiac passed away in style I am sorry to say. The elevator got damaged one day in my car on the way to fly and I didn't notice. The glider was attached to the bungee which I pulled to the maximum amount for the model and I let go! Within 6 feet of launch the elevator did a smart salute to the fin, the model did a sharp turn to the right, hitting the run way behind me, still attached to the bungee. Poor old "Zodiac" bounced along at great speed shedding canopy, battery receiver and various other parts of the model for the next 200 yards. Not a happy day.

Never happier that when I'm.....on the other hand I hate having to.....
I get great satisfaction out of building wings but I hate gluing canopies. I have trouble in getting the celluloid to stick.

What got you started?
Ray. I was 13 years old when the first meeting was arranged. Friday nights were always well attended. It cost 3d (old money) - just over 1p in today's money - for the evening, 2½ hours of flying around the pole and entertainment supplied by Ray. By the way, calling him Ray was banned. It was Mr Malmström or "Sir" was used. After a couple of years calling the Maestro Ray was allowed on Friday evenings but your life was on the line if "Ray" was used at school.

What do you fly?
Not a lot these days. I am a bit of a fraud now. I did build RC gliders and flew them. Now I usually fly indoors as National Health knees do not let you run after models. I like to build my own "Butterfly" type models and I have an interest in "Bostonians". I seem to start a model but never finish them these days. At this time I have 3 "Bostonian" models in various states of build.

A time it came close to disaster or phew, only just got away with that!
One day when I was flying a "Zodiac" at Impington field, I was turning to make a landing over the area where the control liners fly now. I turned near the spinney at the edge of the field and came in to land. On landing, another modeller nearby said "That was a close. You nearly went in the spinney" I said "I missed it by a mile." The modeller said "From where I was standing you were only 8 feet from the trees, maybe closer." That dinted my confidence no end on judging distance. Still, I got away with it.

When I'm not aeromodelling.....
I love my garden. Over the years I have probably spent more on trees and shrubs than I should have done, hence my love of garden centres. I wouldn't say we go to many but Lynne has a loyalty card for every one within a 50 mile radius of home. We also like eating out and Lynne says I just like food in general as I always clear my plate!

An unfilled ambition
I always wish I had spent more time building and flying models, but when you are younger there are always so many things to be done. I would have loved to have gone to India but it's to late now to enjoy it.
This year, my ambition is to move the greenhouse. When you get older these jobs seem to need more time. Thinking about doing the job takes most of the time plus TV. Oh well, there's always next year.....

Love the smell of/hate the smell of.....
I love the smell of burning lavender and I hate the smell of silicon sealants.

Old dog new tricks
I have been told a lot of new tricks but within a few hours the information has been forgotten. Things do come back now and then but I tend to stick to my old ways. I think the little grey cells have given up on me.

What is your covering choice and your adhesive?
I'm a tissue man but on large RC models I love Solartex. For gluing tissue I use tissue paste and for Solartex I always use Balsaloc before ironing on to the model.

Do you have a favourite model of Ray's
I particularly like the “Arrow-Air". I have never had a failure from any that I have built, until the wings warp.

Where does it happen?
For many years I worked in a small shed but about 10 years ago my wife decided it was too small as sometimes there were two building in there. Unknown to me she arranged for an insulated shed, covered in UPVC cladding, double glazed windows, a translucent, north facing roof. The shed is 16 feet by 9, of which 11 feet by 9 is workshop and a 9 by 5 walk-in storage room. Pity my modelling didn't match the quality of my model shop.

If you could turn the clock back ...
I wish I had done more powered RC. I would like to have the old days at Harlton field and at Oakington airfield back. They were good days! I also wish I had a large stock of the old rag tissue in a range of colours. I loved using that.

A modeller you admire.
A couple spring to mind.
Bill Dean of Keil Kraft fame. I loved the sleek lines of the Competitor and Contester.
Ray's old friend, Doug McHard who designed some great models. Just look around Old Warden and you will always see a fair amount of his designs.

Bill Dean

Ivan, saying he admired Bill Dean, prompted me to search for some biographical detail:

With a career that began in the UK and ended in the US, Bill gained a reputation not only on both sides of the Atlantic but also world-wide as a columnist, reporter and draughtsman for a number of periodicals. Power duration models, Wakefield rubber duration craft and A2 gliders sprang from his drawing board. Bill did much to foster interest in Jetex and to promote the efforts of other designers.

At the age of 16, Bill Dean joined the staff of Aeromodeller, in 1939, and worked there with another of the greats of UK design, Ron Warring. Called up for military service in 1941, Bill joined the Royal Air Force and, posted to Rhodesia, became an instructor on Harvards. After demobilisation in 1946, Bill again joined forces with Ron Warring who had parted company with Aeromodeller following disagreement with its owner, D.A. Russell. As free-lance designers, Bill and Ron produced a series of publications for the Ian Allen group, variously called Model Aviation, Model Aeronautics and Model Planes Annual. They were also regular contributors to Model Aircraft. When D.A. Russell ceased to be involved in Aeromodeller, they resumed their contributions to that magazine as well.

Bill Dean also linked up with Eddie Keil on leaving the RAF and became in-house designer for Keilkraft kits. His designs were to include Jetex craft, gliders, rubber-driven models and his 'Slicker' series of power duration models, first seen at rallies in 1947. Bill Henderson recalls how Bill Dean's Slicker X power model astonished spectators with its powerful climb at the British Nationals of that year. It was kitted by Keilkraft as the 'Super Slicker'. Eddie named Bill's Wakefield 'Gipsy' as a way of pulling Bill’s leg about his long hair and sandals.

With the appearance of the new Jetex motors in June 1948, Bill promptly became an enthusiastic advocate. His 'Skyjet' series for Keil Kraft appeared four months later and his first published Jetex model design, 'Jetwing' for the 100 motor, was printed in the 1949 Model Planes Annual, at the end of that year. This was followed by the 'Jetex Canard' in the January 1951 Model Aircraft and the Jetex 350 'Flying Saucer' in the August 1951 Model Aircraft.

Again in concert with Ron Warring, Bill founded the Zombies model club, having an invitation-only membership, catering to well known names in the control-line, power duration and Wakefield classes. With such an expert group, the Zombies became a force to be reckoned with in the contest scene. In the mid-fifties, Bill contributed a 'Model Talk' column to the Royal Air Force Flying Review.

In 1953, Bill Dean attended the A2 World Championships in Yugoslavia where he met members of the Zaic family and became aware of opportunities for model designers in the US. Bill subsequently moved across the Atlantic, where his first job was with the Zaic brothers' model company, Jasco (later Jetco), which had been run during WWII by Frank Zaic's father and his sister Christine. Bill also worked as a freelance editor for Air Trails, as a columnist ('Modeler’s Guide') for American Modeler and with SIG on their advertisements.

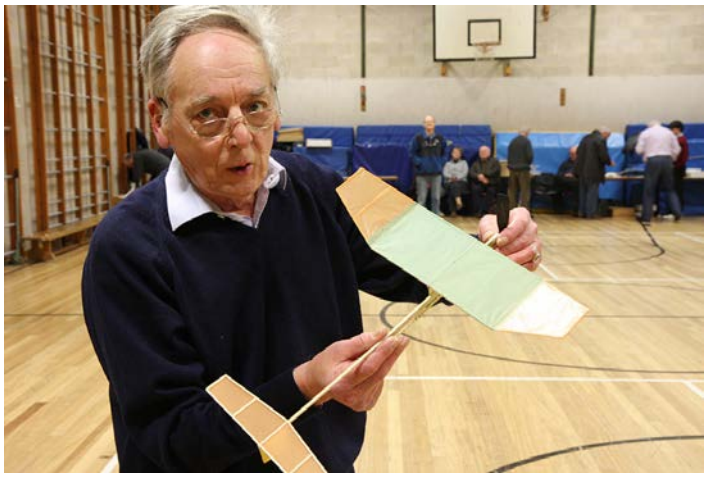
Bill suffered serious injuries on being hit by a vehicle in a car park. The compensation he received allowed him to set up a book and magazine subscription service, Bill Dean Books Ltd, in Whitestone, NY, but his designing days had come to an end.

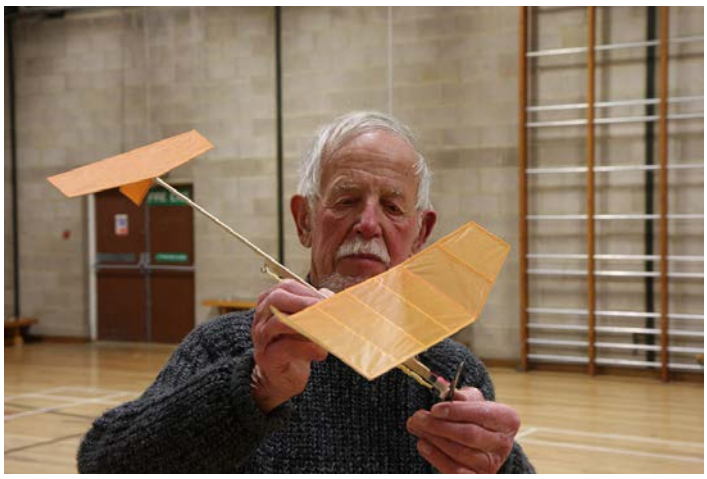
For a Bill Dean Celebration Contest at Middle Wallop, after his death in 2002, 56 of his designs were nominated as eligible models, and these by no means comprised the totality of Bill Dean's portfolio of model aircraft designs.

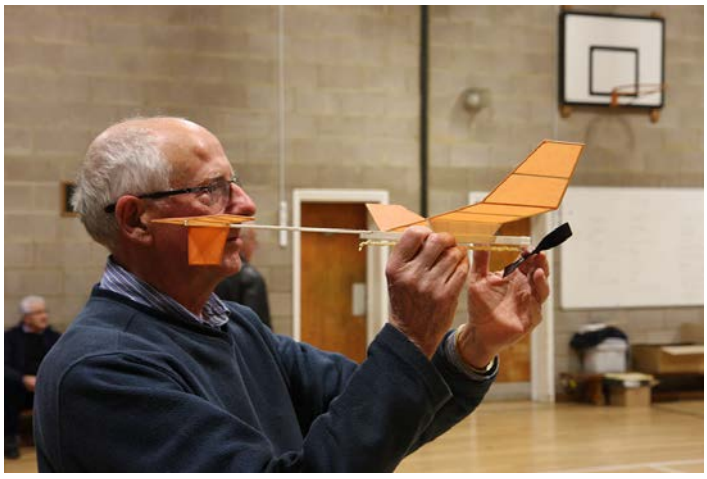
Outerzone currently lists 32 of his plans

The Ongoing Gyminnie Cricket Competition

This competition will run continuously from now until April 11th. It will be in two parts: one in the small gym on Thursdays and one on Saturdays in the large hall. The three best times of each person will be added together for the final score. You will only be eligible to win one of the parts.
The model must be built with what would be supplied with the BMFA kit. The prop may only be sanded on one blade in order to balance it. Japanese tissue may be used to cover it but nothing else. It must be built as per plan, but may be adjusted to get a good flight. Any rubber may be used.







Gyminnie Cricket Competition *6-12-14*

On Saturday there was a profusion of Gyminnie Crickets constantly flying in all directions, yes it was the contest and we had many entries, plus two others. Roy and Tracey are constant visitors to our Saturday and Sunday events. They both had colourful planes which were covered tissue obtained from Poundland. To my surprise this material was of a similar quality to Japanese tissue.
Times were being recorded constantly all afternoon. Phil Bailey and myself were constantly trying to outdo each other which made it great fun. Clive King had a very good first flight of 1minute 30 seconds but could not repeat this even though his model spent a lot of time rattling amongst the rafters. After his third flight disaster struck with a fuselage broken, but he did manage to repair it and go on to win.

1	Clive King	251s
	Bruce Lindsay	245
	David Leach	226
	Phil Bailey	217
	Gotthelf Wiedermann	204
	Margaret Staples	170
	Mick Staples	166
	Chris Strachan	159
	John Wynn	144
	Chris Hinson	132

If Roy and Tracey had been club members Roy would have been 5th with 213s and Tracey would have been 7th with 183

Target Time Contest *22-1-15*

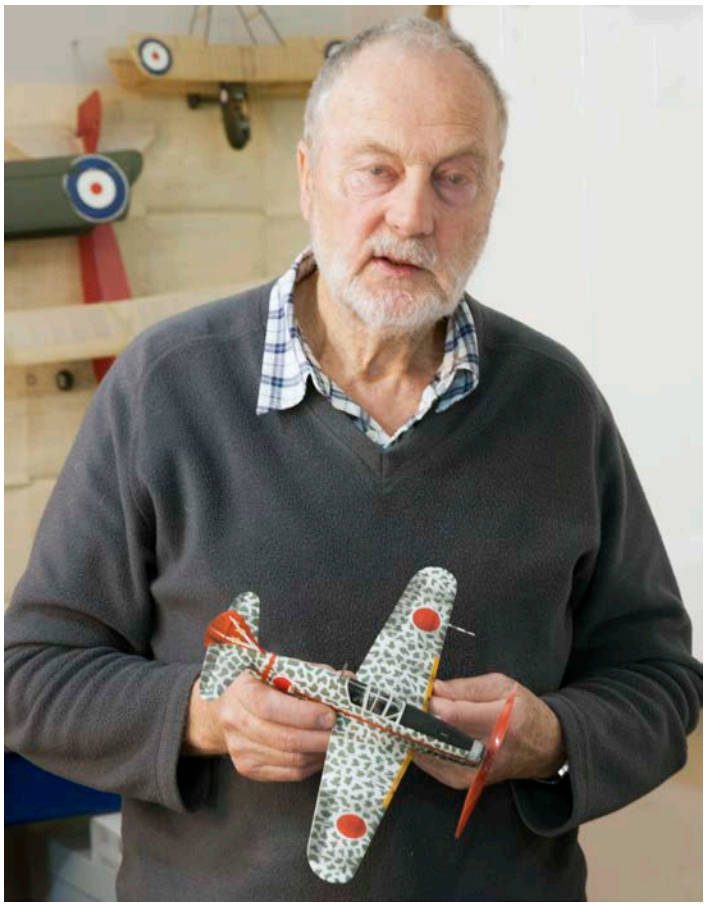
This year we allowed people to use any aeroplane they chose and a varied selection there was: two Gyminnie Crickets, Malmström Hanriot and ArrowAir plus a CF butterfly. The test was to have three flights that average 30s.
Mick Staples and myself were the first to start and my first flight was 30.59s and Mick got 33.85. Mick had consistent flights but just could not get down to 30s. My second attempt was below time so I thought my third attempt would give me a good average but it was over 33s which made me almost 2s over. Because in the past we have had as many as three people within 1s I believed it was still wide open for someone to win.

But to my surprise the other three contestants were all just over 3s awry.

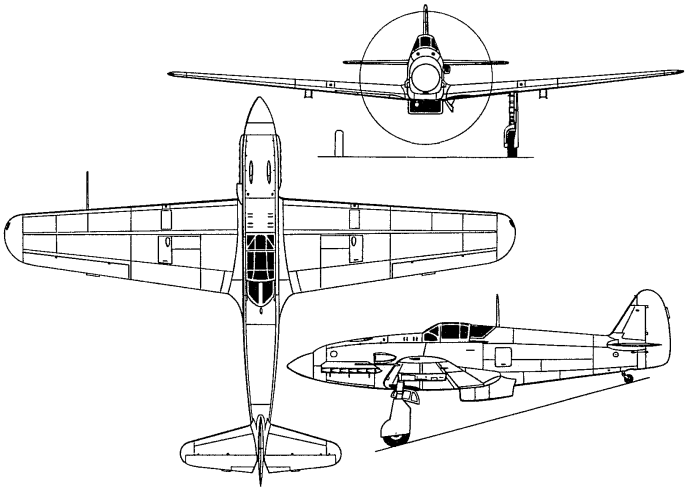
1	B Lindsay	+1.97
	P Haines	+3.23
	R Staines	+3.81
	T King	+3.90
	M Staples	+9.12

Kawasaki Ki-61-1 *foam scale peanut*

by Garry Flack

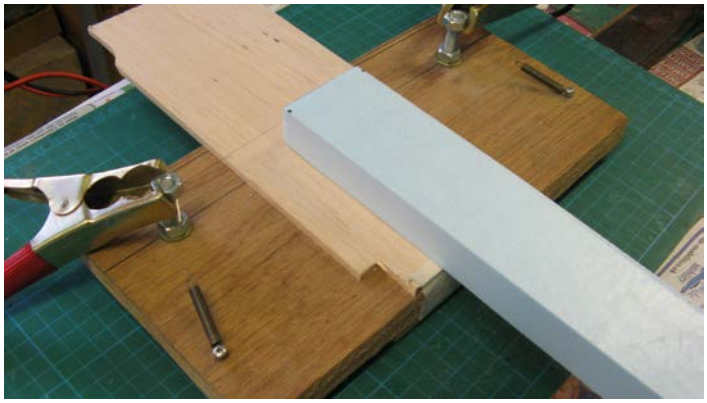


Over a period of weeks I've been building this model and photographing progress, step by step. I chose it with an eye to competing in the Scale Indoor Freeflight Nationals to be held this year in Walsall - April.19th

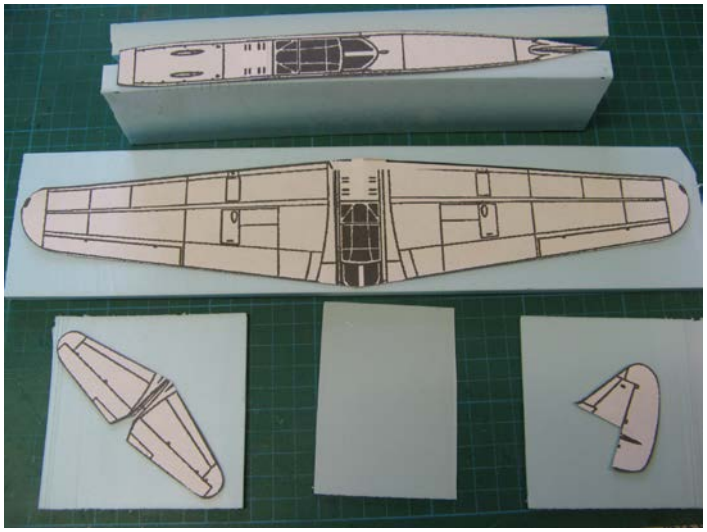


I begin with the 3-view and scale the printing until the span is just over 13" remembering that dihedral will be added later.

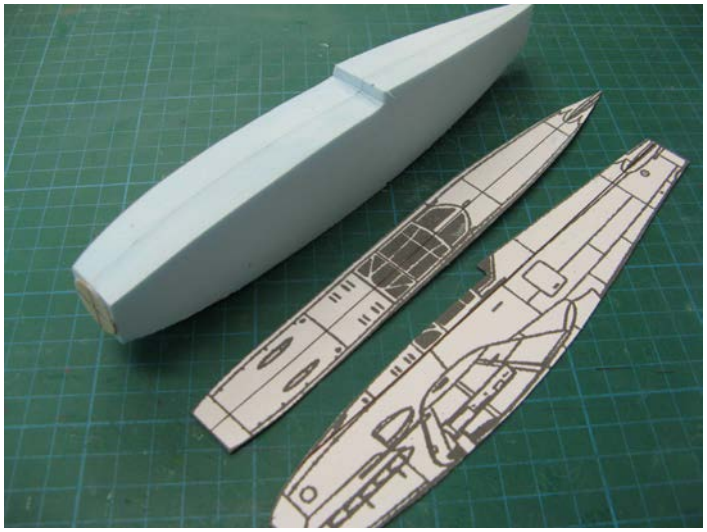
The blue foam is manufactured for insulating floors and is supplied in 25 and 50mm thick sheets - a few off-cuts will keep me going for several models.
Using the 3-view as a guide to size I use my home made hot-wire cutter to produce blocks for the fuselage (a pair of these), wing, and tail feathers.



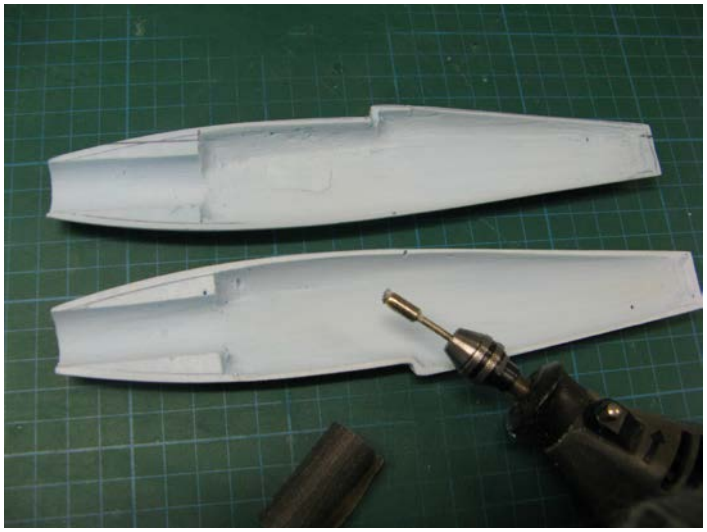
With a little practice it's surprisingly easy to cut smooth, thin blocks. These can then be rubbed down with fine sandpaper and the wing tapered from root to tip.



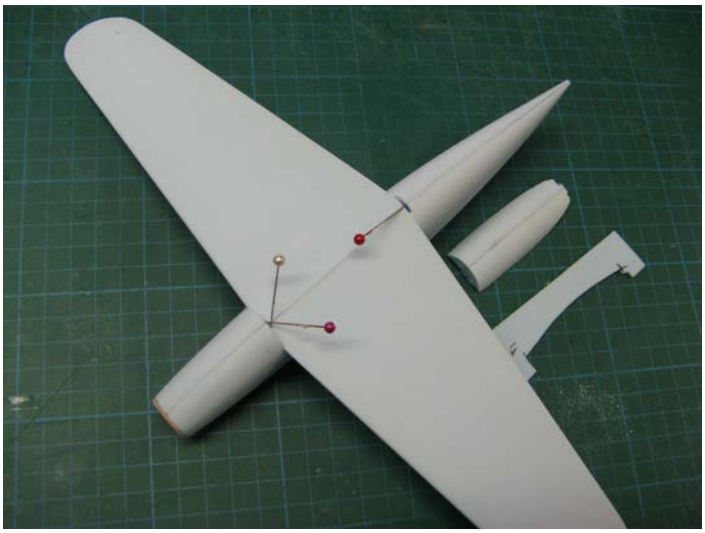
The outline of the fuselage needs to be transferred to the foam, but remembering these marks will be cut away later, I use a fine drill to mark the positions of the leading and trailing edges for both the wing and elevator. The elevator is set 0° relative to the thrust line but the wing I give an incidence of 3 to 4° remembering that when the time comes for trimming there's no chance to pack up a trailing edge or whatever with foam models.



The two halves are held together with strips of double sided tape while shaping the outside. A ply disc provides the nose profile. Next I use a screwdriver to prise apart the two halves and begin removing waste from the inside, first with a scalpel and then with a small wire brush mounted on a Dremel drill.



In this picture you should be able to make out the holes drilled to mark the position of wing and tail. If the scalpel happens to dig in too far or the wall thickness is a little too thin then PVA and a sliver of foam patched onto the inside sorts the problem.



Next the two halves can be glued together, once again with PVA, before tackling the profiling of the wing and tail.

The wing is cut down the centre and the right amount of dihedral added before re-gluing. Turning the fuselage over, a piece of foam needs to be cut away to make room for the wing.

Particular care needs to be taken at this stage to be sure everything is aligned precisely - then wing and tail are glued in place.

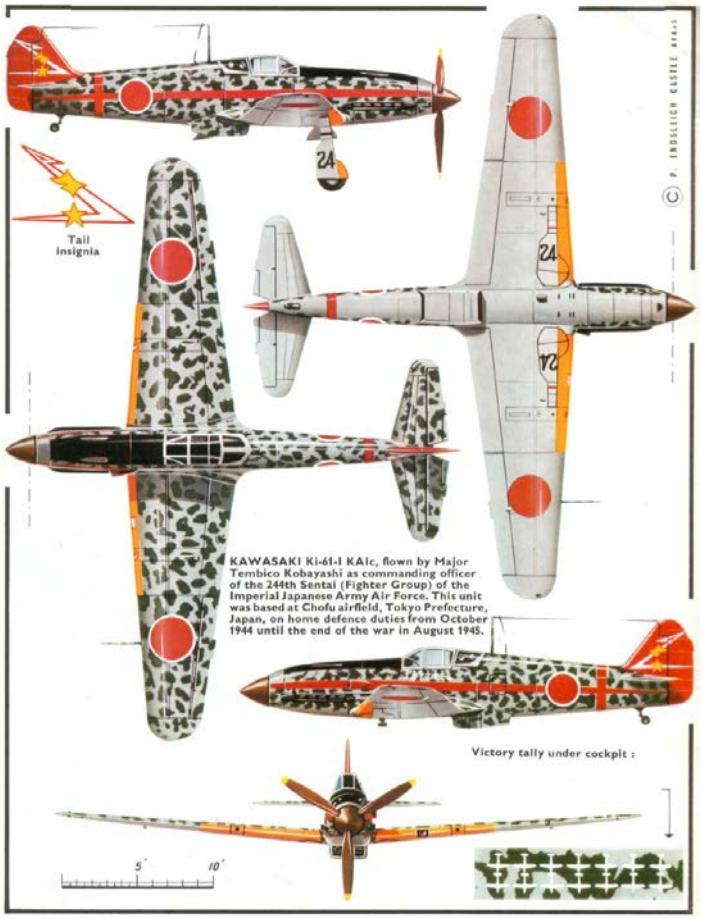
Time to make the canopy from packaging plastic which is held on a frame and softened with a heat gun before plunging the male former through.

Cockpit painted, pilot carved and instrument panel in place. The canopy can be glued and left overnight to cure.

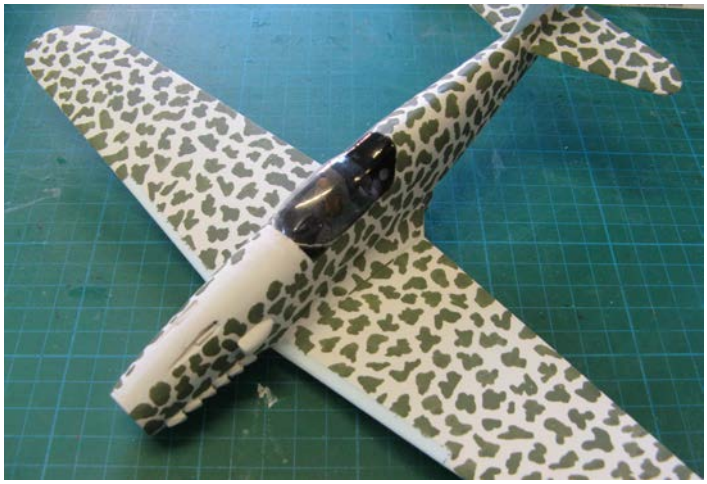
This is when the detail stuff is added: wing fillets, air intakes, radiator cowl, exhaust stubs and so on.

Ready for the paint, but what paint and scheme?

I use Humbrol paint and white spirit. This paint works well with the airbrush.



Contemporary photos are typically black and white and of little use. Fortunately, P Endsleigh Castle has researched the Ki-61 and produced Profile Publication 118 (free to download from HipPocketAeronautics)
This is the illustration which will be submitted in competition and therefore the one to work to.



A base coat of grey is painted over most of the model before the green camouflage markings are added using a brush rather than by masking and spraying. Typically, paint adds around 1½g to a model of this size.

Roundels are painted onto copier paper or tissue and then cut out using an X-ACTO Compass Cutter

Panel lines can be drawn with a 0.2mm pen, taking care not to press too hard avoiding grooving the surface..

The canopy frame and other lines are added using pre-painted masking tape and cut into strips.
Airbrushing adds realisim where the fabric covering of aileron and elevator would sag slightly between the ribs.

A dummy three-blader adds realism when the model is judged. - there are no points scored for the prop.

Job done and just the little matter of trimming . .
Trimming isn't easy with any model, let alone foam models. The prop helps the model to fly anti-clockwise, but left rudder is usually required as is some up aileron on the starboard wing to keep it level. Then it is a question of nose weight and the correct rubber to get the best flight times. Some models fly from the start; some models never fly before destroying themselves.

For Peanut Scale marks are awarded for flying duration and static judging appearance.
The final position for duration is awarded for the best two flights of a possible nine.

The model is judged for workmanship, complexity, authentic detail etc. Bonus points can be awarded for low wing and separate control surfaces etc. Negative points are given for deviation from scale, for example lengthening of nose or tail moment. The scores are added to decide the winning model.

The finished model weighs 9.7g (inc motor but without prop) together with flying prop 4.4g, a total of 14.1g or 0.497oz

In 1996 the *Norwich School* of Richard Crossley, Peter Smart and David Deadman produced a step by step guide to making foam models.
Richard Crossley has readily agreed to the booklet being *bundled in* with this newsletter.

Keil Kraft's -*Falcon*-

getting the monster out of the box

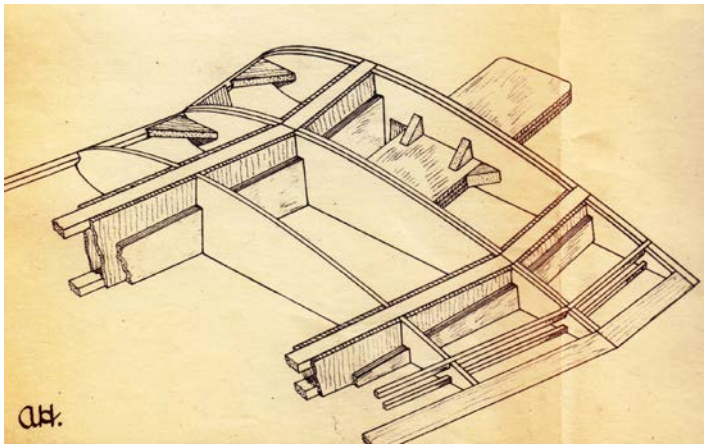
Most of us have built a Keil Kraft model or two at some stage, they have a special place in aeromodelling.

In 1949 Eddie Keil struck some sort of deal with American Ben Shereshaw for permission to produce his 96" Cloud Cruiser which appeared in Flying Aces in 1937.

The biggest kit that Keil Kraft ever offered for sale - the elevator alone measures 36" across - it weighs 8½ lb

He got Albert Hatfull to draw it up and make some changes. As the **KK Falcon** it went on sale in 1949 for 117/6d (adjusting for inflation that would be £126.27 today and compares with the £154.25 that Ben Buckle charge for their Falcon kit).

Albert enlarged the rudder/fin and added some of his characteristic detailing.



It calls for wheels of 6” diameter and motors of 10cc and over. The wingspan is 96” and total area is 8sq ft
When I first heard that Alan Hunter had a near complete kit in his loft I wanted to see inside. I wasn’t disappointed.

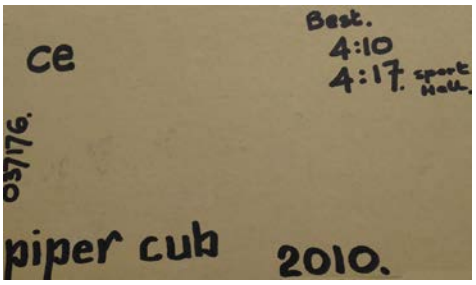
If you want to pour over the plans, they can be downloaded from Outerzone.co.uk

Follow this link to see someone building the Ben Buckle Falcon: http://www.modelflying.co.uk/forums/postings.asp?th=67452

thanks to Alan for the two hours it took him to get the kit out of his loft (makes you wonder what else is up there) and to Richard for tracking down this advert from February 1949

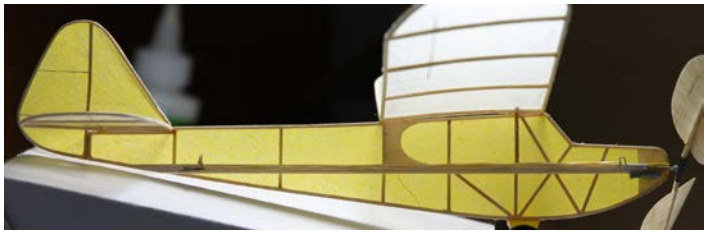
Piper Cub nocal *a lesson in keeping it simple*

You know how sometimes you’re just taken with a model, well that’s how it was with me and this little profile job. Clive King had it out of the box while we were taking some photographs for a series of articles he’s writing. Taking my courage in both hands I asked if I could borrow it and Clive was kind enough to agree.

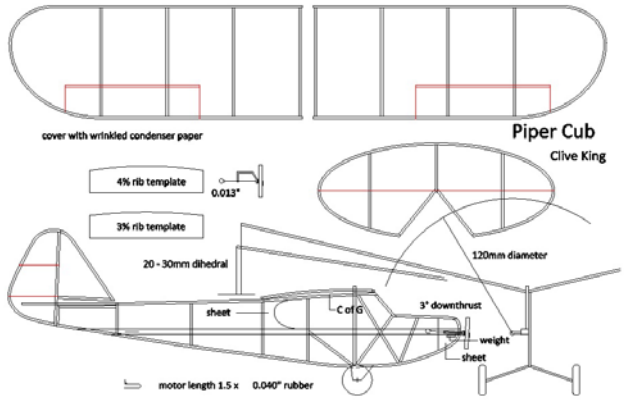


The time of 4:17 on the box lid gives something to aim for.

It took a couple of days, on and off, to sketch the Cub . . I wanted to keep the handling to a minimum so took a couple of photos and pulled these into DraftSight, adjusted the scale and more or less traced them.

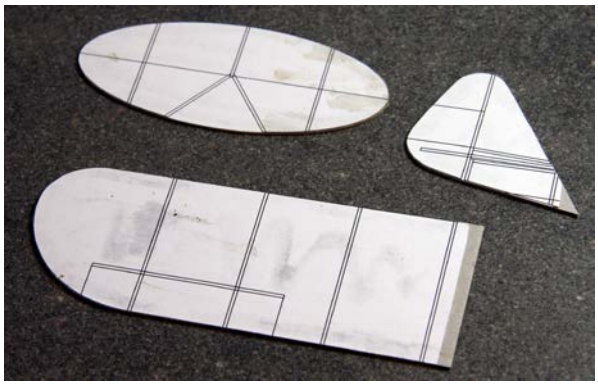


Then it was time to check a few details with Clive:

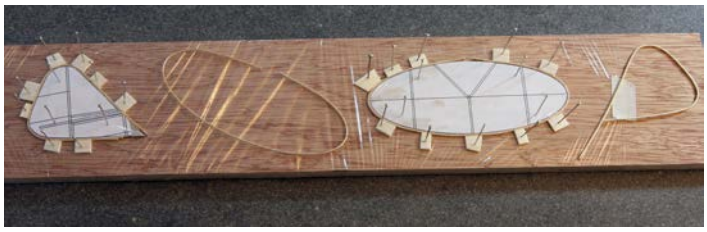


The span is 260mm, say 10”, and features ribs of 3 - 4% camber. The motor stick is 3.2mm or 1/8th square, otherwise Clive has used 1mm balsa throughout. Covering is pre-crinkled condenser tissue attached with spray-mount.
There is around 3° of downthrust built in and a good starting point, he says, would be to use 0.040” rubber. Make the loop 1.5x the 125mm distance from hook to hook. Ready to fly Clive’s model weighs 1.5g. The rest, apart from making the prop, is shown on the plan (bundled in with this newsletter).

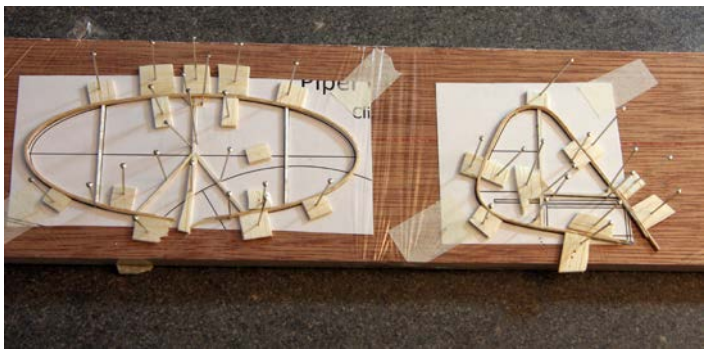
And that was going to be it for this article, except that I kept looking at it and thinking, “that would be quick to build and there’s an afternoon in the gym coming up.” . . So I began with UHU and sticking down elevator, rudder outlines and a onto stiff card.



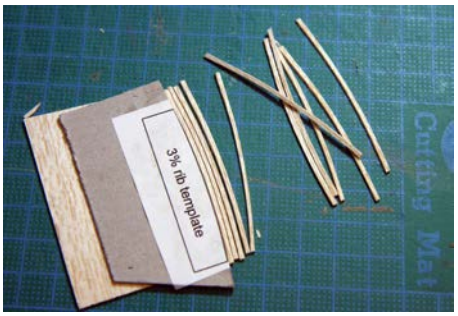
To keep things simple I’d decided to draw up the plan as 1mm square balsa - near enough to what Clive had used and, in any case, you’ll use whatever you’re comfortable with.
Getting out some of SAMS 1/20” or 1.27mm stock strip I tried soaking it in water and coaxing it around the end of the wing . . that was never going to work. Then found some thin sheet and ran off a few strips to try. In the past I’ve soaked the strip then run it gently over the barrel of a soldering iron (not the tip) and pre-formed a curve. Well that might have worked for the wingtip but the rudder has some really quite tight curves. So it was plan B: find a nice piece of 1/32” or 0.8mm and sand it down to 0.5mm, then run off a dozen strips 1.2mm wide. Sure enough, after soaking, these easily pre-formed using heat until they would fit around the cardboard formers and, three at a time, held in place with the odd brass weight.
In the morning the shape was fixed and I took the best two and brushed on thinned PVA around the inner lamination.



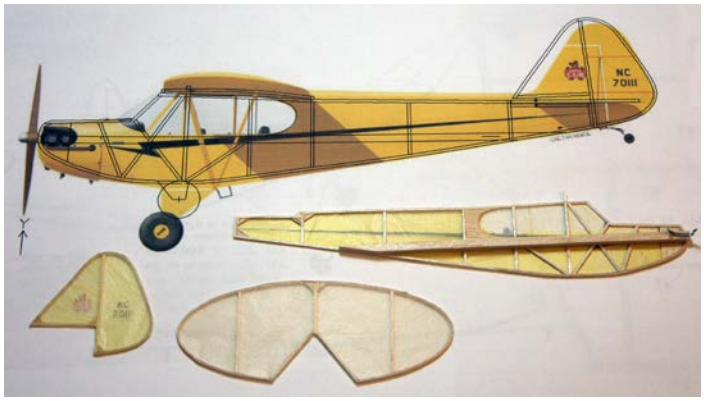
In this snap you can see the two ‘spares’ are holding the right shape.
After an hour or so I could ease the laminated outlines off the cling film and add the minimal ‘structure’.



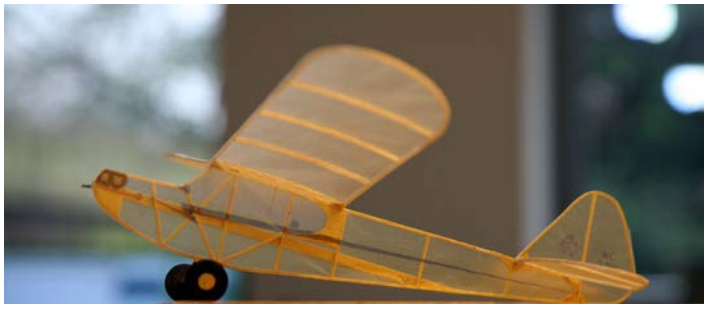
Wing tips and fuselage followed. There’s templates for either 3 or 4% ribs on the plan, so I found a nice piece of 1/32 “ sheet and cut a few.



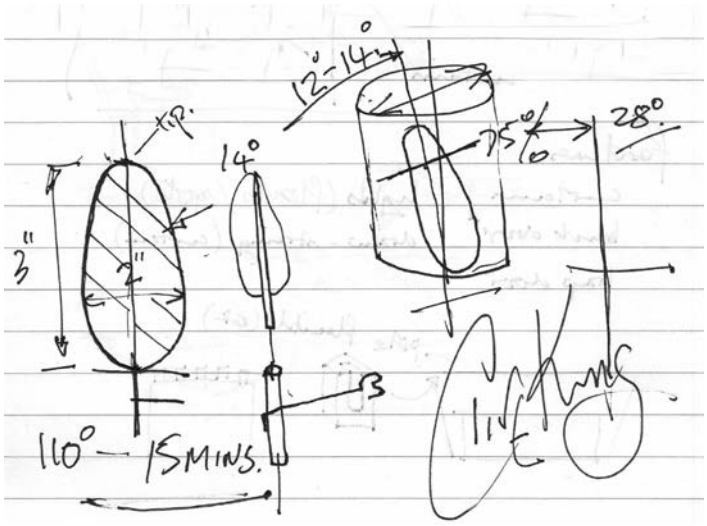
Found an image on the interweb, scaled it and used it to print the condenser paper for the fuselage and rudder.



Finished model 1.2g



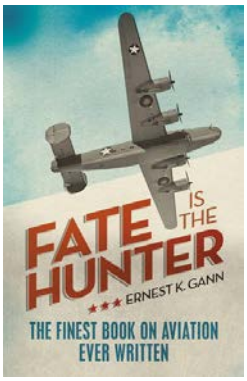
Just the prop to make. I've extracted Clive's instructions on how to do this from an article in the July newsletter:



Aim for 120mm say 4½" diameter and have a go at a reverse S hook . . you'll find details on the *interweb*.

But, if you want to get on with making the model there's every chance that Clive will cover how to make a prop in one of his soon to be published Aero Modeller articles.

I've been re-reading **Fate is the Hunter** and as you'll see from the cover, it's "*The finest book on aviation ever written*"



Here's a quote:
One of the strangest "crashes" in aviation history occurred on the Greenland icecap when pilots of a PBY elected to fly across, relying entirely on their senses. Their first indication that anything was awry came through a lack of sound and airspeed.

With engines turning at full cruising speed, they literally flew onto the icecap, touching it so lightly at first that their speed was gradually reduced until they were at standstill. Fortunately, they had slid upon a smooth area, and when they finally realized their predicament, they stepped out laughing into the snow. Their laughter was short-lived. They were very much alone with a useless flying machine and were a long time being rescued.

Caudron Brothers Aviation Pioneers

by Bob Pigott

What do you know about the French aviators, Gaston and Rene Caudron? Well, I knew nothing about These remarkable men until, by chance I visited the little town of Rue in the area of the Somme Bais, some 20 km west of Abberville.
Close to the central square is the Belfry museum which I was told was of special local significance. As I walked through the door, ahead of me hanging from the ceiling, was a model of an early flying machine and it was then that I became aware that this was an aviation museum devoted to the life of the Caudron brothers, Gaston and Rene, early French aviators. Displayed within the Belfry hall and two further rooms are pictures, models and memorabilia depicting the lives of the brothers.
Gaston was born in 1882 and Rune in1884 and it was in June 1908 that they built their first aeroplane in a barn at the family farm near Rue.

It flew a few hundred metres having been towed into the air by their horse. By 1910 they had started to mass produce aircraft and also opened a flying school. Later their experiments with flexible wings led to the building of their renown G3 plane. Their aircraft were used to great extent in WW1 equipping 56 squadrons with aircraft.
It was during a test flight of a twin engine R4 aircraft in December 1915 that Gaston was killed. His brother continued building aircraft throughout the war years.
In the post war period the Caudron company attempted and achieved notable successes . In addition the pilot training school flourished and in total 17,OOO pilots were trained. To further the development of aircraft design and production Rene formed partnerships with great success. It was during the partnership with Renault in 1939 that he withdrew from the company, up to that time he and his brother had produced 10,330 aeroplane.
He died on 27 September 1959.

As I read further into my English guide I discovered that the farm house at Rottoite where the first Caudron aircraft was built, still stood and a memorial had been erected in their honour. I visited Romiotte farm and found the farm yard and also a monument which had been cleaned for the 100th anniversary of first flight which had taken place at Romiotte farm.

Famous Flier

best guess

John Wynn correctly guessed that it was Tony Neal, Ted Grieg and A N Other (would you believe Bruce Lindsay). Tony Harper and Margaret Staples correctly identified Tony and Bruce - so a tie? Well it would be except that John could also identify the model and engine - has them in his shed!

Answers on a postcard if you're able to say for certain who this is - yes, that's right, flying three control liners at the same time.

Great Covers

Aero Modeller January 1948

and requested, once again, by Mrs Trellis of North Wales

Footnote

a comment or two from the editor

A huge thank you to everyone who has contributed to this edition of the newsletter.
If there's something you'd like to look up in an earlier article then don't forget that John Upton posts copies going back to the beginning of 2014 on the website:
www.**ivcmac**.co.uk