



Model Aeroplane Club

Founded in 1946 by Ray Malmström

January 2016

Edited by Bryan Gostlow
Distributed by Tony Harper

November public day

a report of goings on



Richard Crossley talks to a visitor about his *Pou du Ciel*

The brilliant thing about the Public day is that you get to meet some top modellers and be inspired:



DFS 230 Glider by Dave Banks



Grumman Tiger Cat by John Scates



Parnall Elf



Shuttleworth Collection



Breese 5 "Aloha"

1927 Air Race



Competition results

Viking

1	Roy Wilson	3.55
2	Roy Sellwood	3.29
	Bruce Lindsay	2.57
	Clive Anderson	2.19
	Michael Marshall	2.12
	Mick Flack	1.44
	Chris Strachan	1.35
	Phil Haines	1.32

Bostonian

1	Jim Crossley	3.02	Junior
2	Peter Adams	2.42	
	Clive Anderson	2.37	
	Robert Simmonds	1.13	

Car Racing

1	Andre Bird
2	Chris Strachan
	Dave Banks
	John Court
	Garry Flack

Mass Fly Off

Jim Crossley
Alan Jarman

Mobius Action Camera

a report by Gotthelf Wiedermann



I have been experimenting (playing with!) with the Mobius Action Camera for in-flight filming during the past two seasons. At the time I purchased the first camera nearly two years ago, the GoPro Hero was the HD camera to have. It is an excellent video camera which is now offered in a wide range of models and specs. However, I decided against the GoPro for a variety of reasons: weight (111 g), cost (then £350), extreme wide angle lens (170 degrees), and I wanted a camera that had a small forward facing area to minimise drag. Fortunately, the Mobius Action Camera had recently come on the market. It is a development of the 808 key ring camera and is offered with a standard and a wide angle lens. It is only £50, offers HD, weighs only 39 g and is the size of a matchbox, with the lens shooting from the smallest surface area, in other words ticking all the right boxes. I now possess both a standard and a wide angle lens camera. As so often, there are clones as well as authentic products available more cheaply from the Far East, but as you never know which one you'll get, I sourced my two cameras from a well sorted supplier in the UK, Webbex Mini DV Cameras (<http://www.minidvcameras.co.uk/index.php>). They offer a wide range of spares, including batteries, as well as technical support. The latest version (V3) costs £58 plus p&p. The cameras come with a USB cable and a versatile mounting bracket. A whole range of alternative mounting systems is available on the Webbex site.



Mobius mounted on under-wing platform

The standard lens has a horizontal shooting angle of 85 degrees and a vertical angle of 46 degrees, those for the wide angle lens are 116 and 63 degrees respectively. At the back there is a slot for a micro SD card - it is advisable to use a good quality one of at least 4Gb - and a socket for a USB cable to connect to your computer. The two metal plates on the top surface are heat sinks. There are three buttons on the top for power on/off, recording start/pause, and a mode button. The latter toggles between video mode 1, video mode 2 and photo mode. Charging is recommended to be from a PC or laptop. A fully discharged battery takes 2.5 hrs to charge, but as I never run my batteries down completely, mine usually need between 30 and 60 minutes to charge. A fully charged battery is said to last for 80 minutes, but the latest version has a 820 mAh LiPo which is claimed to last for 120 minutes. From the Webbex website you can link through to the Mobius support website (<http://www.mytempfiles.info/mobius/index.html>) which gives access to an excellent manual as well as to a piece of freeware (mSetup.zip) which makes it easy to configure your Mobius camera and saves getting lost in a maze of knob twiddling on the camera. There are too many configurations to go into here, most of them being really useful. Important for me is the ability to film inverted when mounting the camera under a wing or the fuselage, and to select the time lapse in photo mode. I always use the best quality setting (HD at 1080 and 30 fps). Once you have chosen your settings, there is very little need to change them.

To attach the camera to a model, I glued velcro to the bottom of it. You can then stick some corresponding velcro to the model where required. I made my own bracket which can be slung under a wing and held with rubber bands. This can be fitted or removed within seconds without affecting the model. I find that the image quality compares very well with that of the GoPro Hero camera. Judge for yourself at <https://www.youtube.com/watch?v=m8hwfEmslzo> . Still photos

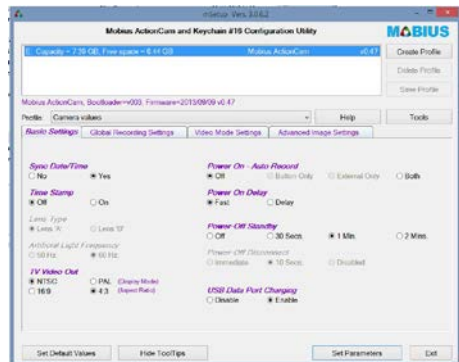
take up about 1.5 Mb, videos ca 120 Mb per minute at HD setting. I find that the biggest challenge is to fly as straight and level as possible, as the more the camera pans, the fuzzier the video becomes. In other words choose a windless day and fly as much as possible in straight lines. This produces the best quality videos.

There are quite a number of reviews and setup videos on the internet.

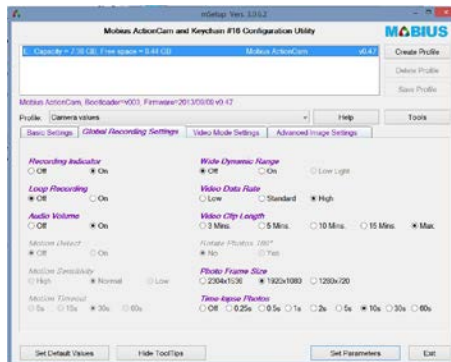
I would recommend these for a start:

- <https://www.youtube.com/watch?v=7wmlyD1fM4M>
- <http://www.rcgroups.com/forums/showthread.php?t=1904559>
- <http://www.tested.com/tech/461790-testing-mobius-action-cam-rc-plane-video/>
- <https://www.youtube.com/watch?v=u0oaSBc7sxc>

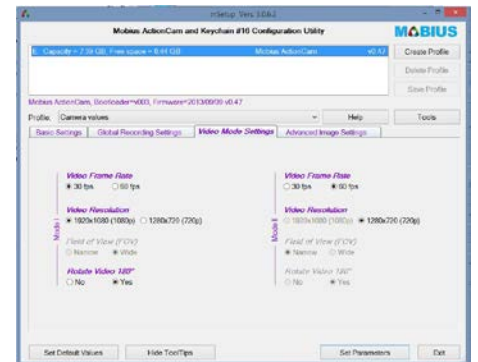
Here are two videos of my own:
<https://www.youtube.com/watch?v=WfUDN7IAPE>
https://www.youtube.com/watch?v=_eXHIs9eYD4



basic settings



global recording settings



video mode settings

The National Aerospace Library

Historic Aircraft Models

In the November newsletter I mentioned that Richard Fairey, founder of the great Fairey Aviation company had started out as an aeromodeller. Shortly afterwards Brian Riddle, chief librarian, emailed to say, *"an original Fairey A-frame model is on display at the National Aerospace Library at Farnborough."*

and goes on to add, *"as you may have read, the Royal Aeronautical Society has just launched a new website."*

<http://aerosocietyheritage.com>



compressed-air driven monoplane



the Stevenson flying machine

Coup d'Hiver

Talk given by Michael Marshall



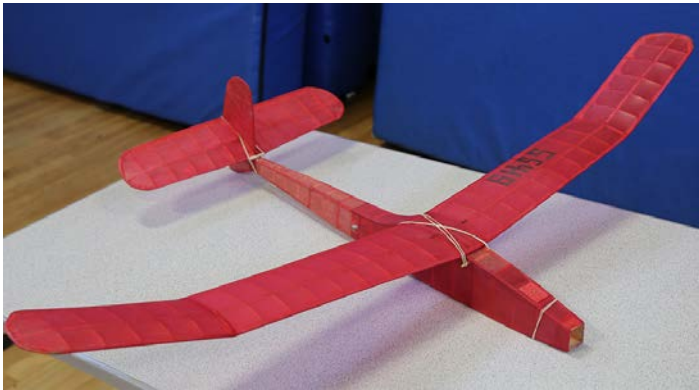
Chris hoping against hope?

Chris needn't have worried as Michael delivered an excellent talk on his approach to Coupe and how it has evolved over a number of years.

He began by showing us his Lo Zigolo of 1952 and the Aero Modeller free plan – December 1961 – of the Garter Knight, designed around a postal competition. Both were for single bladed props. Coupe rules haven't remained static:

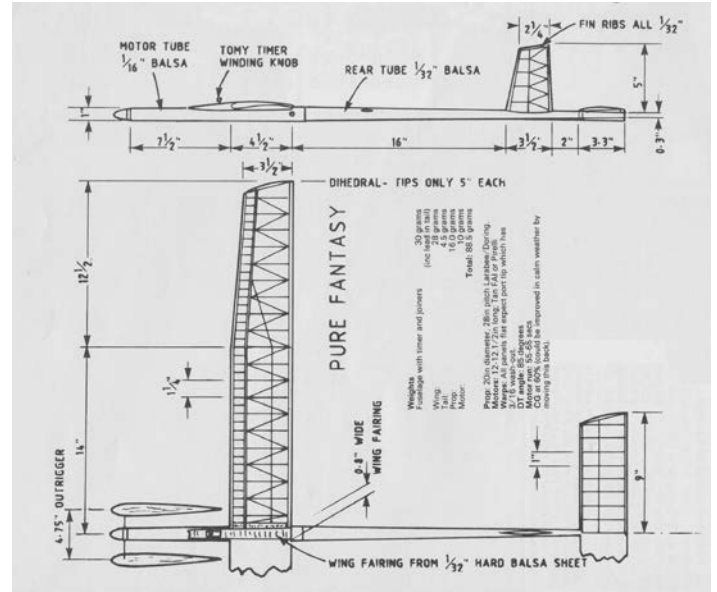
Year	Rubber - g	AUW - g	x-section	notes
1943	15	free	L ² /200	No balsa
1959	10	80	20 cm.sq	ROG
1971	10	100	n/a	n/a
1980	10	80	n/a	n/a

The area rule having been dropped and no longer any need for ROG the rules have stabilised around a 10gm motor and a minimum all up weight of 80gm.

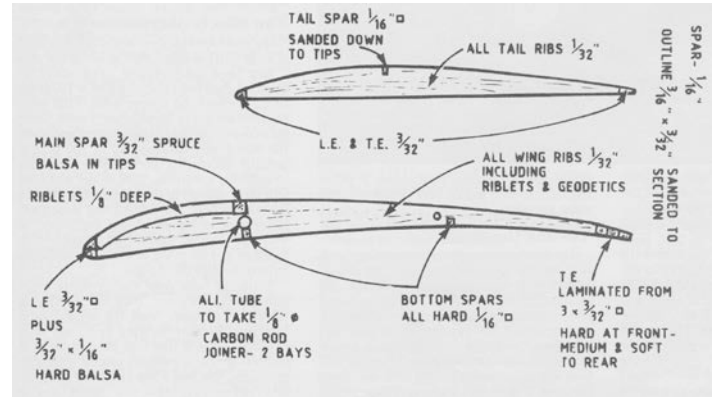


Lo Zigolo of 1952

A significant model for Michael was Dave Hipperson's "Pure Fantasy" described as a 'state of the art Coupe' in March 1990 Aero Modeller. This model featured a rolled balsa fuselage and represented his ultimate design, following on from his winning Artoo described in March 1978 Aero Modeller and reflecting rule changes.

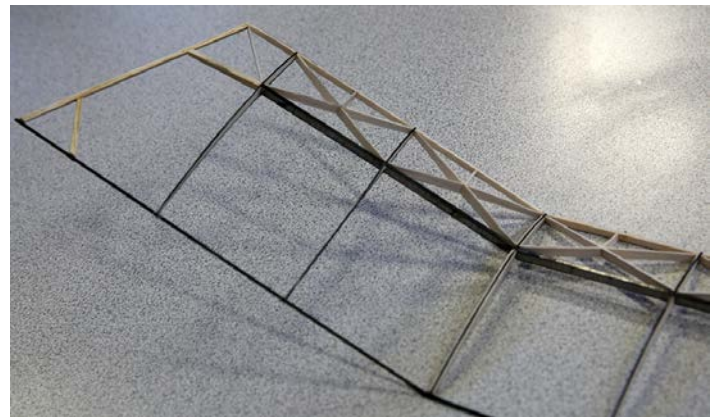


Dave Hipperson's "Pure Fantasy"



all balsa construction

Michael adopted this wing planform and section but although it began as a balsa structure he has evolved a combination of CF spars, though balsa cored, CF cap strips and TE. He covers first with Mylar then tissue. Though not quite indestructible this approach produces more weather resistant wings.



one of Michael's more recent wings

He eventually gave up on the rolled balsa fuselage and stopped making front ends in favour of Kevlar motor tubes and front ends, including Montreal stops, bought in from the Ukraine.



waiting for the right moment . . photo: Dave Hipperson

Winding

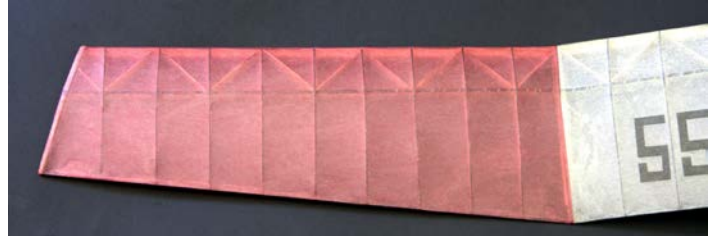


Winding is out of the model and for this Michael has some neat fittings. These allow him to slot a fully wound motor into the model and even to have more than one motor prepared and ready to go.

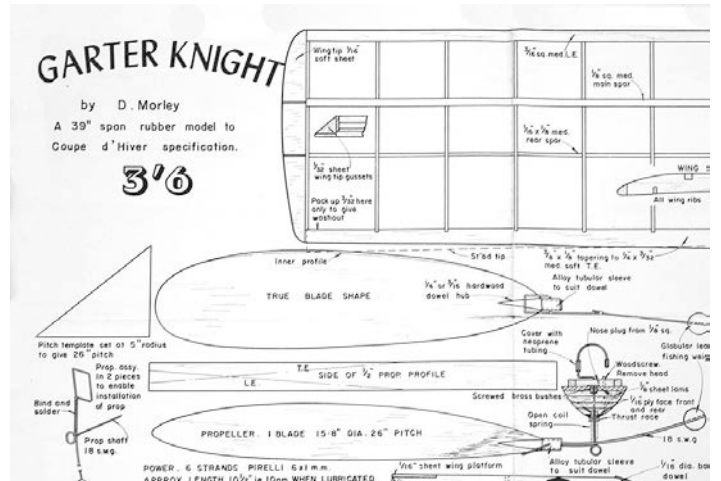


Launch sequence

He pays careful attention to an air temperature sensing device, not for absolute temperature but one which gives an indication of changing conditions as, hopefully, some lift moves through. He described the enjoyment of really giving the model a good javelin like throw! A clockwork timer holds the elevator down in the climb, before as the motor torque comes off, allowing it to move up into the glide position, and begins counting down to D/T.

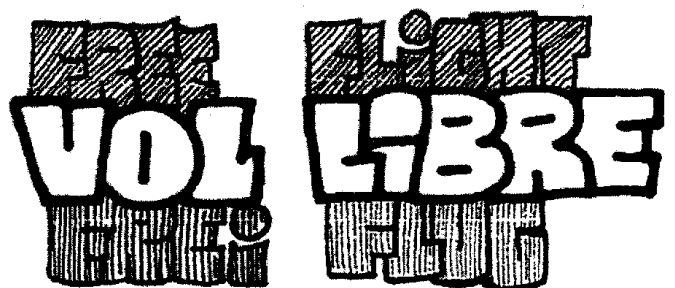


Coupe's are flown with 120s rounds and in that time they can look awfully small and far away, though black tissue covering helps to keep them in sight. Then it's off on retrieval, taking a tracking receiver and searching for a signal. He went so far as to say that if his tracking system went down for any reason he wouldn't fly.



December 1961 AeroModeller free plan introducing Coupe d'Hiver

Flying in France and alongside the French is all part of the fun, even if that means flying rounds in 10" of snow. He even subscribed to a very Gallic publication: Vol Libre which was largely hand drawn and ignored contemporary DTP practice. Sadly, after 200 editions the editor Andre Schandel, retired.

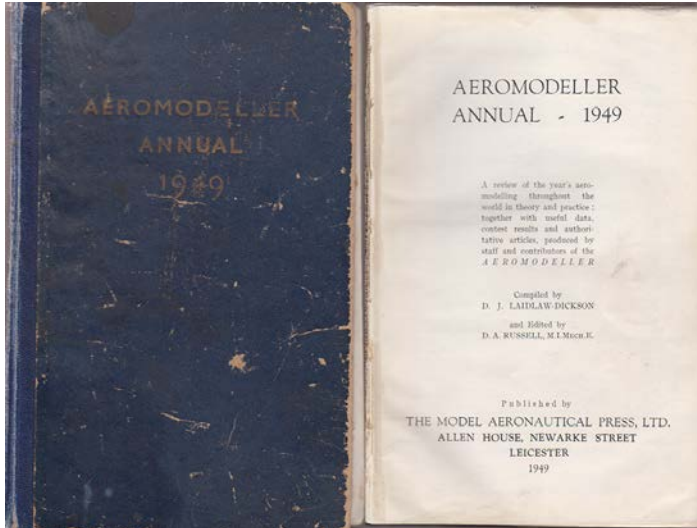


Michael's modest account and his enthusiasm for all things Coupe infected us all.

thank you Ed

Old Warden bargain

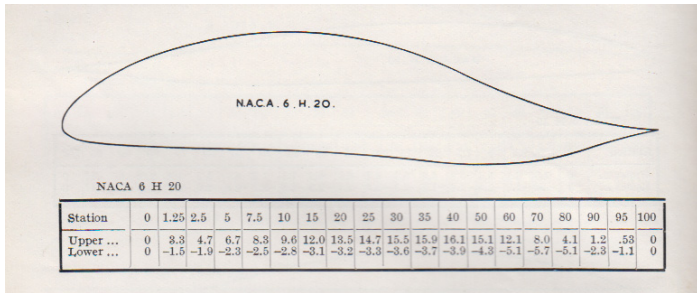
engines and airofoils by Ed



Not so long ago all you had to turn to were a few thumbed copies of Aero Modeller and the odd catalogue, but now with the interweb there's no end of stuff to look at. Either by looking on line or buying up books, long since available from publishers, for a song or from AbeBooks.co.uk or similar. Recently I got my hands on a SAM 35 year book, borrowed from a friend, and even a copy of Free Flight Quarterly. Page after page of quality content. From the BMFA stall at Old Warden I picked up the Aeromodeller Annual for 1949 for just £4. Two sections were particularly rewarding: one on aerofoils section and another titled "Engine Analysis" which I'll return to later.

Aerofoils sections

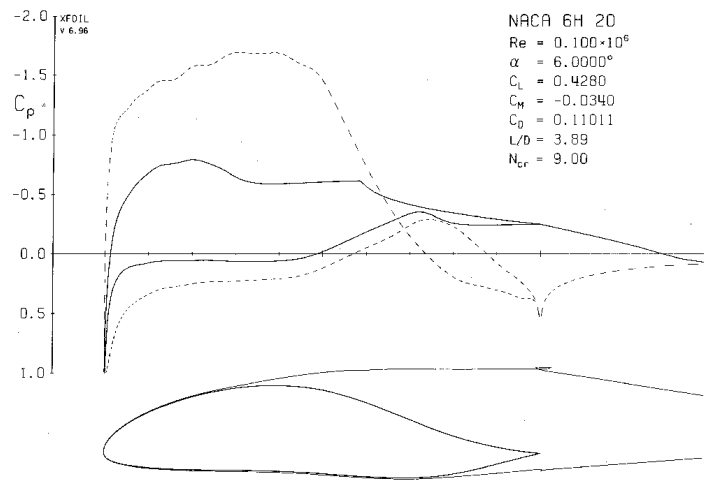
Among all the sensible and worthy aerofoils was this one:



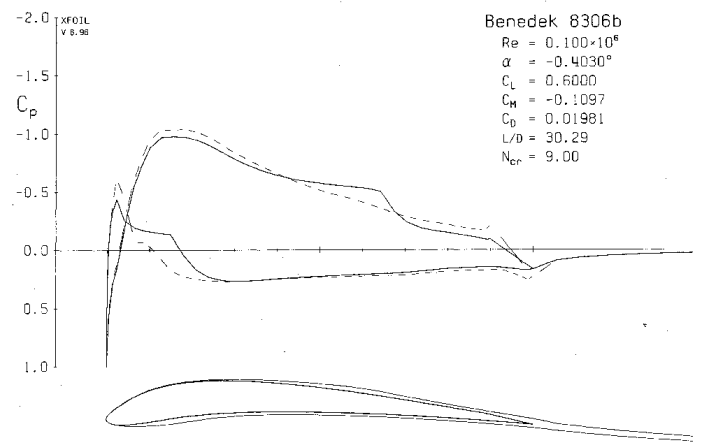
to which you respond, "what on earth?" Maybe for a strut or wing root, John McIntyre thought it might have been developed for a helicopter rotor. Well, intrigued, I asked John to process it with some special software he has called "X-FOIL". The answer came back, "don't even think of building with this!" As modellers we occupy a very remote part of the realm where Reynold's numbers are low (low speeds and small chords). Well, at values typical for free flight (Re 100,000) this aerofoils has a best L/D of just 3.89.

Following Michael's excellent talk on Coupe d'Hiver I got around to asking him what aerofoil was in current use. He came back with, "Benedek" and I found the profile for Benedek 8306b and asked John to run it. The result this time was much better and goes to show Michel really knows what he's talking about because B 8306b has an L/D of 30.29 and a wing with this section (ignoring the drag from all the other bits) would have a minimum

sink rate of about half of a foot per second (0.188m/s) but don't quote me on this.



NACA 6H 20



B 8306b

Unless you are competing at national level performance isn't everything, but these plots underline that because a section may be useful 'full size' it doesn't follow that it suits our models.

Engine Analysis

The other section in my bargain annual from 1949 concerned engines. Altogether it describes 18 of these, ranging from .3cc "Kalper" to a 9.98cc NORDEC R.G 10

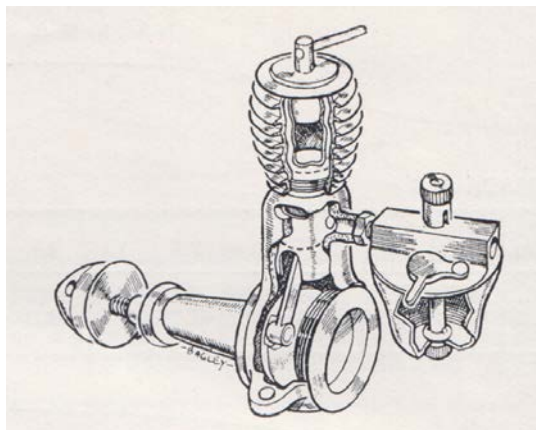
I got chairman John and Alan Hunter to look down the list and pick out some of the more interesting ones.

When Alan replies you often get *bonus* content such as:

"- quite a list - I would select the Kalper as it is the same age as me - started life in 1948 - only know of one owned by a club member and that is Derrick Camps - he had his in a lovely 32" Span shoulder wing FF sport model - do not know its name and maybe he designed it but was a looker and nice flyer - often thought about it as a subject for electric RC as is, or scaled up a bit. The Kalper Crankcase and Choke tube were castings and had a

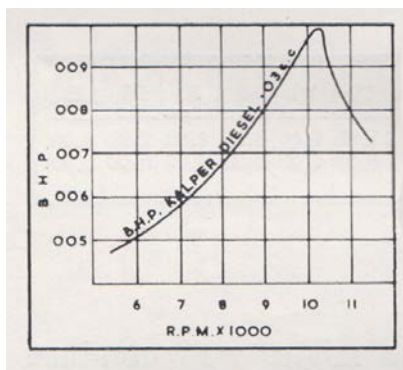
distinctly "hand fettled" look about them - i.e. rough - but they were good on the inside. Derrick's was a lovely little runner - not a rev machine as were side port but ideal for sport FF as very controllable - I remember it burbling away on the sports field in the 60,s."

"Kalper" .3 cc



Manufacturers. Seymour Hylda and Co.
Sole Distributors. Arthur Mullett, 16, Meetinghouse Lane, Brighton.
Retail Price. 52s. 6d.
Delivery. Ex stock.
Spares. Ex stock.
Type. Compression Ignition.
Specified Fuel. Ether 6 parts, petrol 5 parts, Castrol 4 parts, or Mills and Ether equal parts.
Capacity. 0.32 cubic cms. .0196 cubic in.
Weight. 410 grains.

Compression Ratio. Not disclosed.
Power/Weight Ratio. .169 b.h.p./lb.
Mounting. Beam upright and inverted.
Recommended Airscrew. 6in. dia., 4in. pitch.
Recommended Flywheel. 1 1/4in. x 3/8in.
Tank. Celluloid pressing.



Bore. .2510in.
Stroke. .402in.
No. of Ports. 1 inlet, 1 transfer, two exhaust.
Cylinder Head. Diecast, screwed to liner.
Contra Piston. Special alloy, friction adjustment.
Crankcase. Diecast.
Piston. Cast steel, hardened, ground and lapped, flat top.
Connecting Rod. High tensile steel machined from bar.
Crankpin Bearing. Cast steel, hardened, ground and lapped.
Crankshaft. "Nichrome."
Main Bearing. Bushed, cast steel, hardened, ground and lapped.
Little End Bearing. Plain.
Cylinder Liner. "C" Ubas, hardened, ground and lapped.

Night Witches

588th Night Bomber Regiment



Polikarpov Po-2
inset: Rufina Gasheva and Nataly Meklin

Tony Neal sent me some coloured photos and one in particular caught my attention. Rufina Gasheva and Nataly Meklin served in the 588 night bomber squadron. Only the 588th would remain an all-women regiment, including mechanics, throughout the war. Both were much decorated and it's recorded that Rufina Gasheva flew 980 night missions. The regiment flew in wood-and-canvas Polikarpov Po-2 biplanes, a 1928 design intended for use as training aircraft and for crop-dusting, and to this day the most-produced biplane in aviation history. The planes could carry only six bombs at a time, so multiple missions per night were necessary. Although the aircraft were obsolete and slow, the pilots made daring use of their exceptional maneuverability; they had the advantage of having a maximum speed that was lower than the stall speed of both the Messerschmitt Bf 109 and the Focke-Wulf Fw 190, and as a result, German pilots found them very difficult to shoot down. An attack technique of the night bombers was to idle the engine near the target and glide to the bomb release point, with only wind noise left to reveal their location.

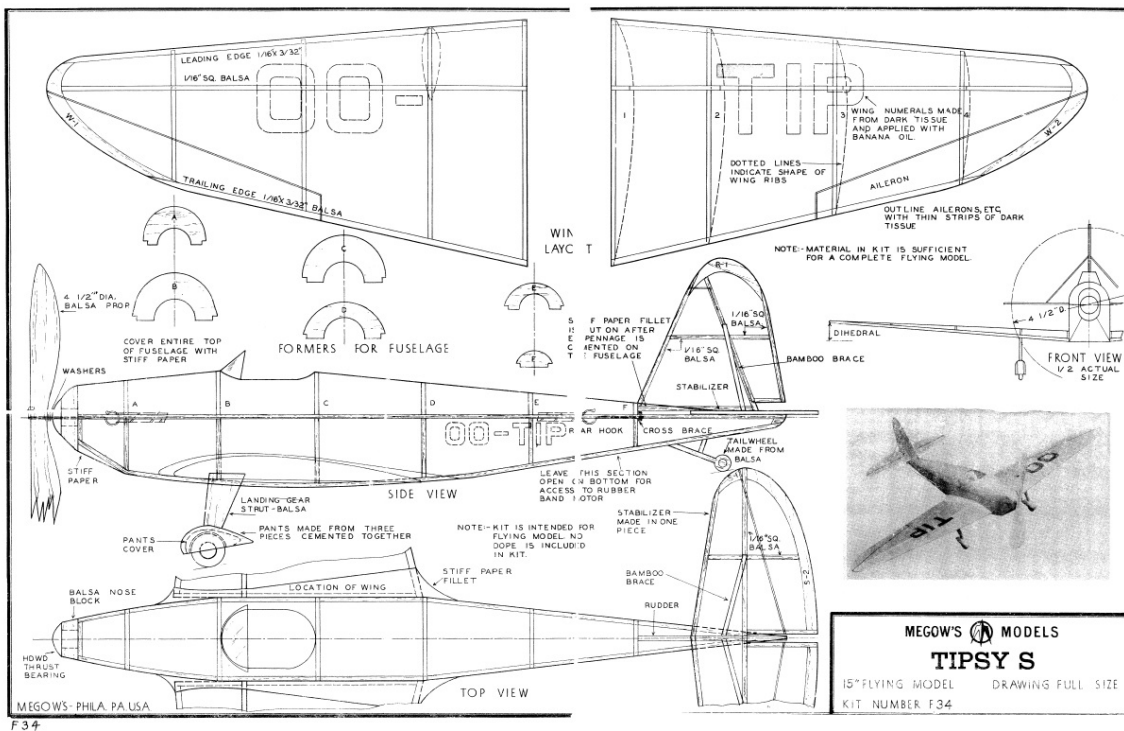
German soldiers likened the sound to broomsticks and named the pilots "Night Witches." Due to the weight of the bombs and the low altitude of flight, the pilots carried no parachutes.



Rufina Gasheva and Nataly Meklin colourised

Tipsy S

Ernest Oscar Tips



The last newsletter, Nov/Dec 2015, included an item about the Topsy B, saying it was a natural subject for modelling. Well, Andrew Moorhouse remembered having a MEGOW'S plan for the Topsy S shown above, though he doesn't remember ever having built from it.

Ernest Oscar Tips joined Fairey Aviation in 1915 having escaped from Belgium. He was put in charge of the erecting department at Fairey's Hamble base. After Firefly and Fox production had got under way he found time to work on a light aircraft of his own design. The first of these was the S1 of 1934 and the Douglas engined prototype carried the civil registration OO-TIP

You can download a plan, including formers, from Outerzone.co.uk



Clive King

expert welder and champion flyer



Clive King, 76, was a former head of engineering at the Welding Institute, and also "knew his way round all things mechanical", his family said.

He was an aero modeller all his life and during the last 20 years had been a well-known and successful competitor in flying model aircraft indoors, winning eight national championships.

Clive grew up in his family home, Red Roofs Garage in Waterbeach, and as a boy loved watching speedway, going to the Le Mans 24-hour race, and Formula One Grand Prix. In 1955, at 16, he started an apprenticeship at Cambridge University's engineering labs in Trumpington Street in Cambridge.

His daughter Sharon said: "Having a meticulous eye for detail, ingenuity and incredibly high standards for precision engineering he earned kudos with Lord Baker, head of engineering, who made him responsible for building Kenneth Martins sculpture that stands outside the labs today. Representing latest technologies in welding, it features in Cambridge's Sculpture Trail tour."

Married in 1967, he and his wife Cindy lived first in Great Shelford and Longstanton, and then the family moved to Bottisham when Clive became head of engineering at 'the Welding Institute in Great Abington.

He travelled the world advising on the latest welding techniques, and worked on a nuclear submarine, 100 miles of cracks on the Severn Bridge, a pipeline in Alaska, infrastructure in Borneo, and oil rigs in the North Sea.

Sharon said: "He was a keen landscape painter and produced murals and set designs for community events.

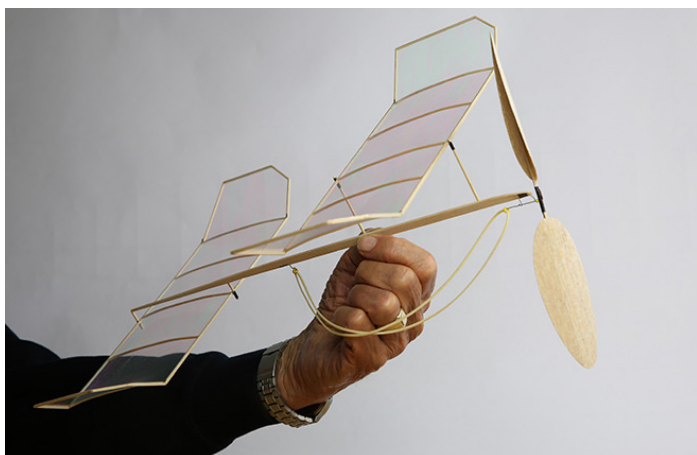
"He believed that the future of popular indoor flying was in the use of local sports halls. His series of articles in *Aero Modeller* magazine, covering the skills needed and a suitable design for flying in such sites, were his last contribution to the hobby he loved. He is much missed by his friends in the Impington club and the wider community.

"Indomitable and courageous, he fought terminal cancer for a year and passed away with his family by his side - wife Cindy, daughter Sharon, son Adam and grandson Sam."

Cambridge News reprinted with permission

Indigo

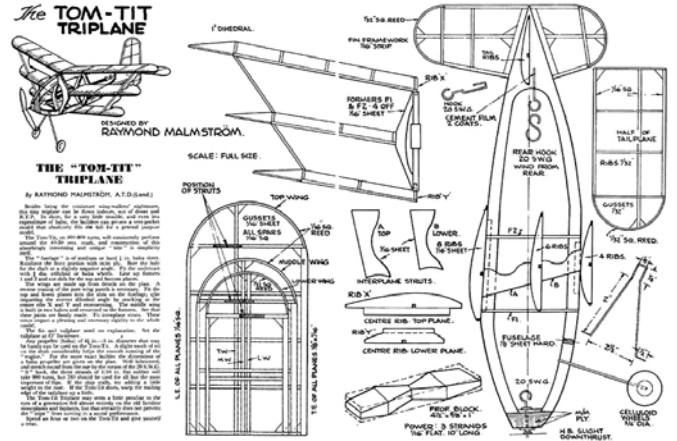
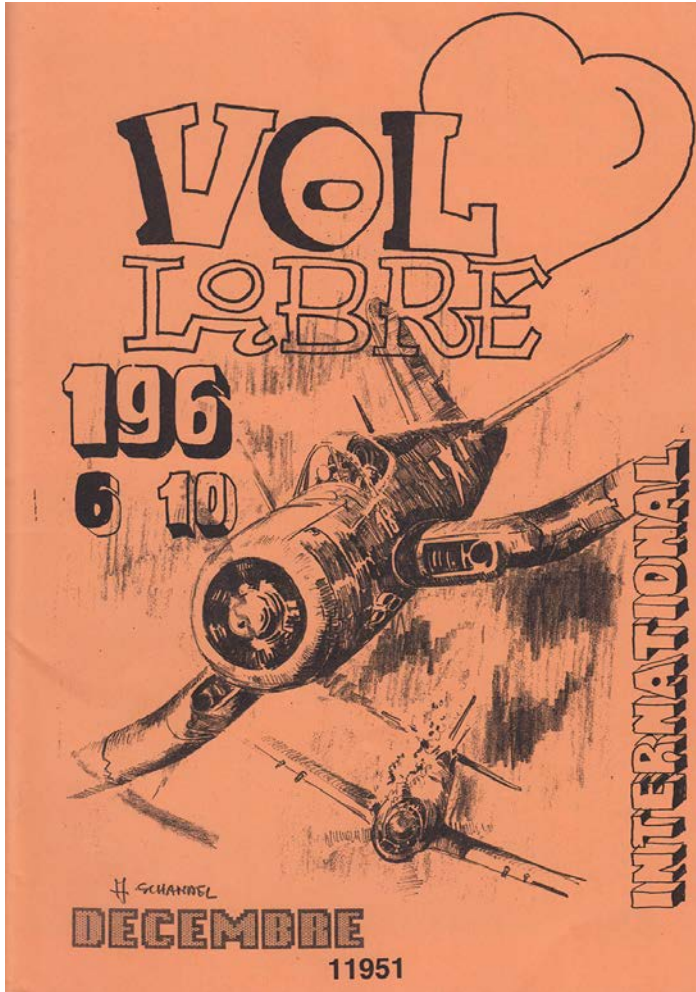
IVCMAC postal competition



In conjunction with the AeroModeller the club is going to run an Indigo postal competition over twelve months. As Clive wished, this should give indoor modellers across the country an opportunity to compete and develop their indoor flying skills.

Andrew, the AeroModeller editor, will launch the competition next month and Chris has arranged with Bob Bailey to give advice on trimming and flying at the March 20th Public day.

Check the *Indigo* page on the website for details and progress of the competition.



thought of building a Tom Tit?

The editor of Vol Libre decided that 200 editions, not surprisingly, were enough. Michael Marshall has been a subscriber and was kind enough to lend me a few editions for the article above. We're used to glossy magazines that all look the same but these are in a league of their own. - Ed

Hawker Restorations

a comment from Alan Hunter

In my twenties I worked with a certain Tony Ditheridge who was a service engineer on medical equipment CiCo manufactured. I have also just had a look on Ditheridges website: <http://hawkerrestorations.co.uk/> - it is a most interesting site and I did not realise just how many different types he has worked on.

I have not seen Diffo, as he was known, for about 40 yrs but he did know what he was up to. I remember him saying on TV that the Hurricane was not easy to restore beause of the sheer number of jigs required, spent more time/expense on the tools than making the actual parts, at least they have been used on a number of them now.

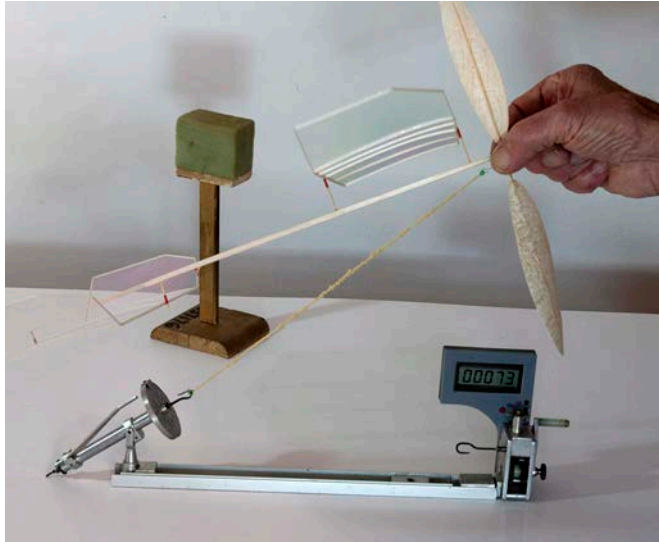


photo from hawkerrestorations.co.uk

Torque Indicator

easily made

If you have the urge to be competitive, like Michael Marshall, you'll need to measure torque *as* you wind. In his articles Clive urged indoor modellers to wind off the model and using a torque meter or, strictly speaking, a torque indicator as it is uncalibrated.



from Clives series: Inside Indoors

This torque indicator isn't the latest word in design but is simple and easy to make. It consists of a tube, a wire running down the middle and a scale with pointer. You'll need to mount it and have it *articulate* in some way as you move around while winding.

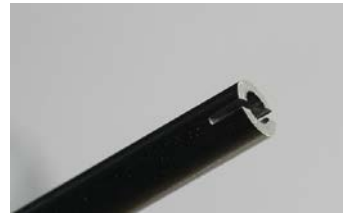
A 230mm CF tube of od 5mm does for the tube though that does finish up rather long overall [but helps with sensitivity]. If you go to Cornwell Model Boats you can pick up a plastic universal joint and some coupling inserts:

- MA 5000BLK universal joint
- MA 5580 5mm insert
- MA 5585 6mm insert
- MA 5560 2.3mm insert



these bits will set you back a tenner

The wire running down the centre needs to be held in some way at the back and for this you should saw a small slot. The wire can later be bent over and held with heat shrink. It will then slip neatly under the 6mm insert and locate in the universal joint. I tapped the 2.3mm insert for an M2.5 bolt to fix it, but there's more than one way of skinning a cat . .



slot or sawcut



wire held with heat shrink



The 6mm insert slips over the heat shrink



It helps to file a slot a slot where the wire bulges a bit

I drew up a dial, had it laminated and have spares if you want one.

Epoxy the dial to some ply and drill a hole for the 5mm insert – you might want to shorten it a bit.



leave enough to support the dial

Epoxy the dial onto the insert. The grub screw neatly lets you set/reset zero by rotating the dial.

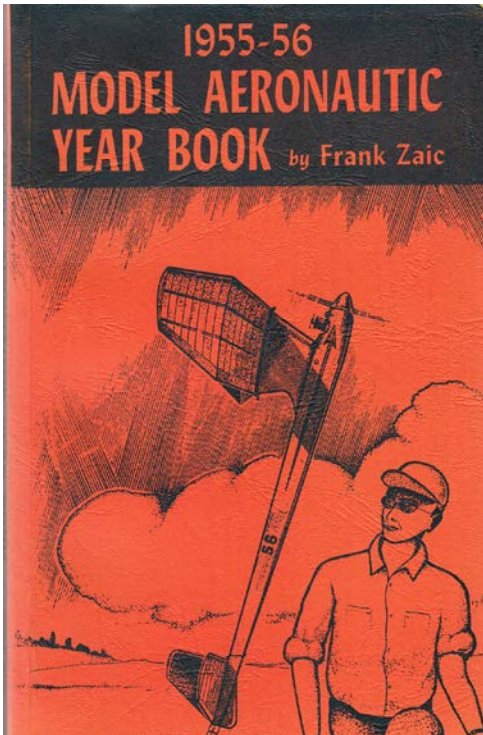
Bend up a pointer. It can be attached with heat shrink when you're ready and a plastic nose button from SAMS completes the construction.



Choice of wire: well, for sensitivity, I used 210mm of .012" and soldered it to something a bit thicker at each end. If push comes to shove it's easy enough to take the thing apart and try a different wire.

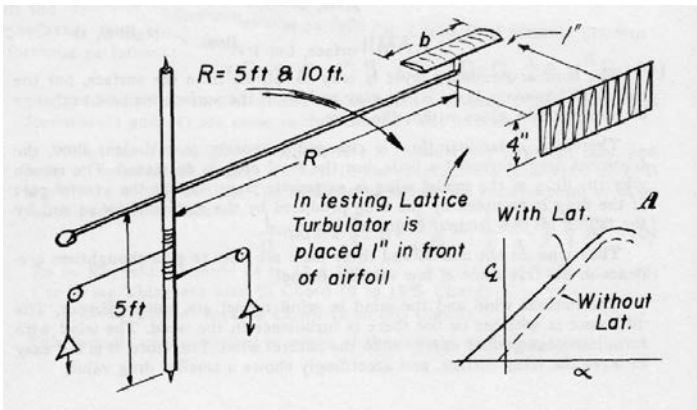
Staying Up

airfoils - or should that be aerofoils?



Well Frank talks about *Airfoils* but then his books were published in New York.

In the 1955 – 56 edition he introduces some work done by S Suzuki who developed a whirling arm test set-up.



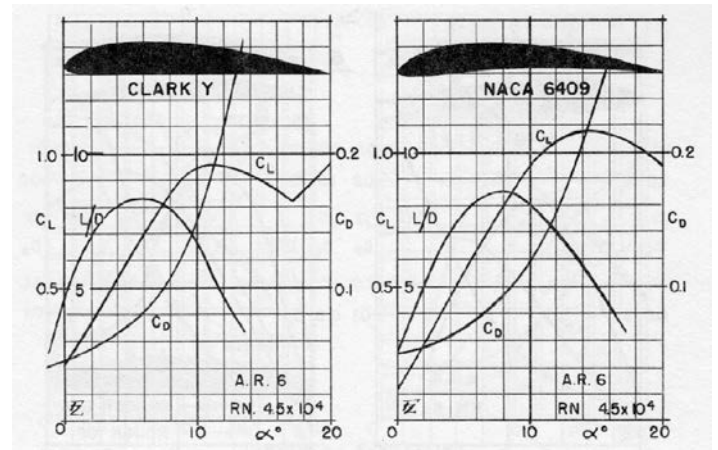
If you're wondering why he didn't use a wind tunnel, well maybe one wasn't available or suitable to the low speeds he wanted to investigate. It comes back to Reynolds' numbers and he made his measurements typically around 4.5 to 6×10^4 or right where we operate.

He tried 90 different sections between 1948 and 1952. He made three wings for each test with ribs spaced at 40% of chord and, naturally, covered them with Japanese tissue.

Let's begin with two familiar sections: Clark Y and NACA 6409:

The Clark Y profile was designed in 1922 by Virginius E. Clark. The airfoil has a thickness of 11.7 percent and is flat on the lower surface from 30 percent of chord back.

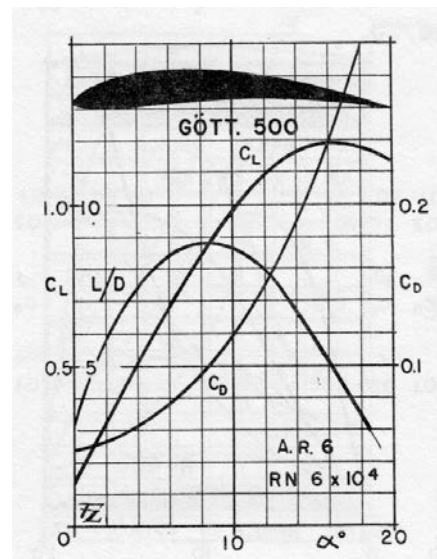
The Lockheed Vega used Clark Y and the Piper Cub used the quite similar USA 35B.



There's a lot of information here but the first to pick out is the R_n of 4.5×10^4 this represents a wing of 0.1m or 4" chord being flown at 6.5m/s or 14.5 mph - sound familiar?

Neither of these is a 'high lift' section but the undercambered NACA 6409 has a slightly higher C_L max: 1.09 compared to 0.95 L/D is similar but the NACA develops maximum lift at higher angle of attack.

If you're looking for a good gliding section and want the model to really 'float' then we could look at the next aerofoil:



Göttingen aerofoils go back to 1919 but were continuously developed. This one has more camber and more maximum lift than either of the two above: C_L max of 1.2 and slightly better maximum L/D.

For maximum *range* a glider should be trimmed to fly with maximum L/D close to 6° for the Clark Y but around 8° for the NACA 6409, but is maximum range the same as staying in the air for the longest time?

You'd get the maximum range (distance travelled) with the incidence arranged to be around 8° but a little higher to float around, looking for *minimum sink* (maximise time in the air).

Lastly, Suzuki found his aerofoils performed better with roughened surfaces.



Reno Air Races

Steve Mynott brings back the photos

The Reno Air Races, officially known as the National Championship Air Races, takes place each September at the Reno Stead Airport a few miles north of Reno, Nevada. Air racing is billed as "the world's fastest motor sport." This year Steve and Tony returned a second time since their first visit in 2010.



Steve up front in a FedEx 727, modelling an IVCMAC Tee Shirt

Last year's winner in the Unlimited Gold class was "Voodoo" P-51D Mustang at 462.926 mph



Voodoo

This year the winner was "Strega" another modified North American P-51 Mustang and piloted by 68 year old 'Hoot' Gibson. 'Hoot' is ex Navy and a test pilot having flown the F-14 Tomcat. He later went to NASA and flew five shuttle missions: STS-41-B in 1984, STS-61-C in 1986, STS-27 in 1988, STS-47 in 1992, and STS-71 in 1995

The race final consists of six laps around an eight and a half mile course.



Strega

As you can see from this photo, Strega is Merlin powered, now developing around 3000hp but at the cost Steve says of the characteristic *Merlin* sound.



'Hoot' Gibson pictured with his team

The third contender of note was *Rare Bear* a Grumman F8F Bearcat which has dominated the Reno Air Races for decades. It has the more powerful Wright R-3350 (from a Douglas Skyraider) in place of the Pratt & Whitney R-2800 engine that is standard for a Bearcat. Much modelled Steve says.



Rare Bear

The Reno Air Races take place against the backdrop of the Nevada desert.



Sea Fury's exiting the 'valley of speed'

The race includes several days of qualifying, followed by four and a half days of multi-aircraft heat racing. Heat races begin with all the aircraft in the air, line abreast, formatted on the chase aircraft. Pole position is on the starboard wing of the chase aircraft. He pulls up to signal the race start.

'Unlimited' isn't the only racing and some years ago Jet racing was introduced, mostly L39 Albatros & L29 Delphins.



DH-115 T11 Vampire

Vampire T11 WD186 came through the field this year beating all the 3rd generation Jets to win the Jet Gold final. Steve & Tony saw some hurried last minute fixes – sealing the gun ports with foam and liberal use of Duck Tape. In a qualifying heat the U/C doors started to come down in high "G" turns and the owner thought if he could solve the issue there was another 20mph to be gained. The door issue was fixed just before the final and the Vampire took Gold with Pilot Pete Zaccagnino in the left hand seat lapping at over 502 mph.

The link See below shows WD186 its first practice flight on Wednesday 16th September and the jet heat on Thursday 17th. Just copy and paste it into your browser to see it.

https://www.youtube.com/watch?feature=player_embedded&v=sqSxQ-2Uapo

The event is sponsored by Breitling, Swiss of course, and their display team of L-39 Albatros is flown by mostly French pilots.



Breitling display team

Tony thought they were, "as good as"

During the week of the air races there is a static display, which includes some rare birds such as the Lockheed Harpoon a variant of the Ventura. It came off the production line and went straight out to the desert. Later it was pulled out of there and used as a water bomber, so it has done a lot of flying.



Lockheed Harpoon

As Steve and Tony weren't rushing off anywhere in the evenings they were able to meet the crews and look around the aircraft after the day's flying.



Tony in the right hand seat of Lockheed 12



Lockheed 12 Electra Junior

They met the owner of the Lockheed 12 who had flown it back for New Zealand after major restoration. On Friday evening they went out for a meal together and by all accounts he is a colourful character, but some stories have to stay in Reno.

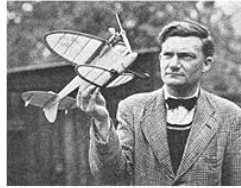
Website

a work in progress



In Cambridgeshire secondary schools are called, "Village Colleges" and Impington VC was one of the first. The buildings of 1938/9 by Walter Gropius and Maxwell Fry are Grade I listed. The school opened in 1939, two weeks after the outbreak of World War II. As a village college, it was originally intended to encompass all aspects of learning in the village, and included prominent space for adult education. Ray Malmström was appointed art teacher shortly after the war and soon began the model aeroplane club. Many of his designs were first built by his pupils, indeed more than one founder member is still a member of the club. The small field suited his rubber free flight designs, or is that the other way around. Indoor flying took place in the hall and his art room, even i/c 'round the pole'.

Ray holding Mimi, a 1953 design for the Aero Modeller

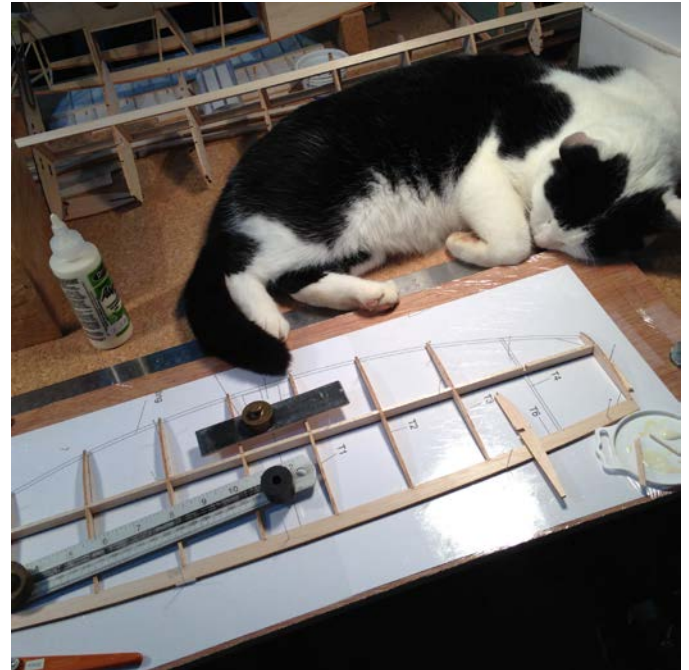


We've had a club website since 2001 or so when Dave Burkin created one for us, but everything moves on and it needed, a bit like Dr Who, some rejuvenation. I knew it would take me a month or so to get to grips with it so elected to create a parallel site which you can find at: www.impmac.co.uk

In Cambridgeshire we're used to the notion of a Village College but it puzzles people elsewhere, hence *impmac* to make it a bit easier to find.

I looked at the websites of quite a number of other clubs and was struck by how many are really mfc [model flying clubs] and so wanted to make the point that many of us still build as well as fly our models. Anyone who looks through back copies of the newsletter will see that. Or they might try browsing the galleries [six at present] and will quickly see what sort of club we are.

Our link with Ray is unique and I'd like to add, for example, Alex Imrie's Vintage Corner piece from May 1986 *AeroModeller*, "The Vintage Years of Fliar Phil" together with photos and plans. something – I'd like to hear from someone who can *first hand* recall the RTP in Ray's art room.



the thing is, he's not even *our* cat

Footnote

a comment or two from the editor

I tend to edit the newsletter I'd like to read and I hope you enjoy it too. Nevertheless, it's a problem which preoccupies me and I read something the other day where LBJ expressed the dilemma very succinctly.

After reading a speech prepared for him by the eminent economist Kenneth J Galbraith, Johnson asked: "Did y'ever think, Ken, that making a speech on ee-conomics is a lot like pissing down your leg? It seems hot to you, but it never does to anyone else."

As always, if you've contributed in any way to this edition, thank you.

