

May 2016

www.impmac.co.uk

Edited by Bryan Gostlow Distributed by Tony Harper



#### Keeping up appearances Chris supplies another excellent public day

Enjoyed by all but what's the secret? Well the answer has to be in the mix: the exhibition, the competitions, the interval talk, SAMS stall, the venue and the enthusiasm of modellers who join us and join in.

Threading through this newsletter I'll *deconstruct* the public day and reflect on what went into it and what there was to enjoy, but first a thank you to Chris for coming up with the idea and keeping it all together.



John appreciating Terry's Bernfest A2 glider

1/32nd scale

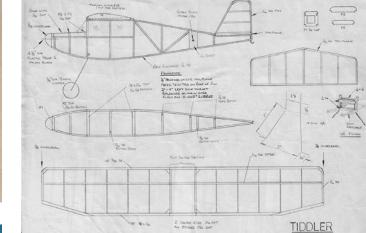
Andrew Moorehouse conjures up three models





Mick's own design Tiddler

A tad battered and bruised but still flying after 30 years. Mick let me have the plan to scan and I'll add the pdf to the website [look in the Free Flight gallery]







If you're looking for details I'm afraid you'll have to ask Andrew as all I know is they're each built to  $1/32^{nd}$  scale and a delight.

### Tiddler

a Mick Flack own design

When Tony Harper hinted that Mick would be re-joining the club after a break of some years he said, "*He's got a lovely little own design called Tiddler that would make a nice piece in the newsletter.*" So here it is . .

Construction looks to be straight forward and there's plenty of detail on the plan, so if you're looking for a proven flyer for the Gym why not try a Tiddler.



a proven performer

### A tissue of truth

#### Esaki Super Flite tested by Richard Staines

During the thinking phase of a larger Scarab I pondered long over the covering to use. My original Scarab was covered in lightweight Esaki tissue from Mike Woodhouse and it allowed me to use techniques of old whilst giving a true vintage translucent appearance. One has to accept the puncturability however. I felt this tissue would not be suitable for the larger Scarab without pre-covering with mylar. Also I was very reluctant to even contemplate a more modern coloured transparent film such as Oracover as it would most certainly not be in keeping with a vintage model. In the old days [not too long ago], such problems never arose as there was the good old Modelspan available in every model shop, but this tissue has now all but disappeared along with many modelshops too. So, the likely outlook was for mylar and Esaki but I had never used this combination before and like most things, the more I read and enquired about the materials and methods, I learned everyone seemed to have their favourite developed by themselves over the years of use. What weight of mylar? What adhesive? etc..

So, as the airframe grew I did more looking around and found a heavier weight of the esaki tissue available from Mike Woodhouse [www.freeflightsupplies.com] which very nearly matched the properties of the modelspan I would have used in the old days on my open power models. So as they say, in for a penny, I ordered several sheets of Esaki Super Flite which is available in a good range of colours except black. On receipt I was intrigued how similar my memory thought it was to heavy weight modelspan, so before covering commenced I tried it for wet strength and tried soaking a piece in water and it seemed very little weaker if at all. I soaked another piece and screwed it up to squeeze the excess out expecting it to fall apart whilst unscrewing to lay it flat, but no, perfect. It would tear a little more easily but it was still perfectly handle-able. Wonderful! The Scarab was covered partly wet and partly dry to see what differences there were. My method is to use dope only, giving the entire frame a heavy coat then, when the dope has dried, laying the tissue on and brushing through with thinners. On undercambered surfaces I apply the tissue dry, covering one bay at a time using full strength dope brushed on to all surfaces where the tissue is to stick and rubbing the tissue down till I am sure a good bond has been made. All upper surfaces were covered with the tissue wet and gently stretched to remove wrinkles before brushing through with the thinners. Needless to say the under surfaces were water sprayed before the wet covered upper surfaces began to dry too much. One coat of 50/50 dope/thinners was applied, then tissue trim fixed with thinners followed by a couple more coats of 50/50. Any blushing present after covering disappears with the first coat of dope. One tip - the tissue has a shiny and a matt side and though it matters not which side is the outer be sure you always have it the same or a difference in sheen will be

apparent.

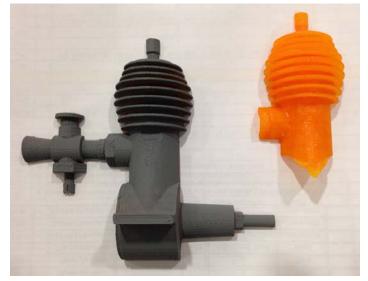
I know that over time I will have holes to patch [and there's a tale for another time] but I am pleased with the result with one proviso: the Scarab x1.5 airframe is an old design that has simply been enlarged with no added structure and the tissue has in places found weaknesses. Also, I should have known better and used stronger wood for the wing tip trailing edges.

With regard to the fuselage - I found the small Scarab to be a difficult exercise as it is so very curvaceous and the lightweight tissue I used could not be applied wet and so was applied in smaller pieces. The rear section aft of the wing had to be covered in four pieces meeting on the horizontal crutch and the top and bottom longerons. Even so it was very difficult. Notwithstanding the fact the Super Flite is not available in black I opted to use Solartex with Litespan for the fin and rudder. The Solartex allowed me to cover the whole fuselage in only two pieces with help from Anne who hung on whilst I heated and stretched the fabric to fit.



Richard's two Scarabs in the exhibition

#### Printed engine



Albert Hatfull specified the 'AMCO' .87 for the original Scarab. You may have read in the Aero Modeller that 3D printed engines are available from ScaleMeDown and Richard contacted him about supplying an AMCO, but it isn't in his current catalogue. Instead Richard opted for a Mills .75 but scaled up to match the model.

[see Aeromodeller article January 2016]

### Ask a man who knows

Mam'selle part II



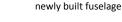
Raymond's Mam'selle in 1988 at Old Warden

Vic Smeed's much loved Mam'selle first saw the light of day in the Dec 1955 AeroModeller. It took Ramond Fella a little while to get around to building one but here's his model pictured at Old Warden in 1988.

If you thumbed through the March newsletter you may have seen that Raymond has been re-covering and adapting for rc with an outrunner.replacing the Albon Dart.

Much of the original structure was retained but a new fuselage was called for.







covered in Polyspan and combining old with new



ready for linking up to the servos

Raymond chose a font and printed out "*Mam'selle*" full size on paper before placing it onto a cutting mat and layering Frisk film over the top. With everything held in place by tape, he chose a sharp scalpel and cut through the masking film, tracing the letters underneath. It's important to keep track of the centres of 'e', 'a' and 'l' as these are needed later on.



these are the discarded parts of the mask

He then peeled off the backing and applied the mask to the wing, adding the missing letter centres. Some additional newspaper masking was added and he was ready to paint.



Acrylic based aerosol



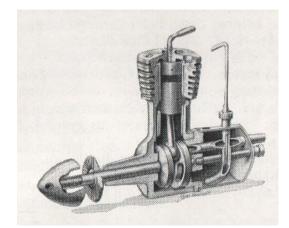
you'll agree, a stunning result which justifies the trouble taken

At 28 the model is now as good as new!

# Old Warden bargain more early engine reviews

AEROMODELLER ANNUAL - 1949

part 3 - E.D. MARK I "BEE" DIESEL.



Manufacturers. Electronic Developments (Surrey), Ltd. Villiers Road, Kingston-on-Thames, Surrey. Retail Price. £2 5s. 0d. **Delivery.** Stock. **Spares.** Complete service. Type. Diesel. Fuel Specified. E.D. Standard fuel. Capacity. .9 cubic cms. Weight. Bare 2<sup>3</sup>/<sub>4</sub> ozs. Compression Ratio.16 : 1 approx.Power/Weight Ratio..368 b.h.p./lb. Mounting. Beam upright. Recommended Airscrew. 8ins. dia., 4ins. pitch for free flight, 7 x 6ins. control line. Recommended Flywheel. As supplied complete with coupling. Tank. Metal, affixed to crankcase, detachable for C/L. Bore. .437. Stroke. .4in. Cylinder. Aluminium alloy casting. One piece with crankcase with integral fins, two exhaust ports and transfer duct. Cylinder Head. Plain, 3 retaining screws. Contra Piston. Case hardened steel. Crankcase. Aluminium alloy (see cylinder). Piston. Flat top, cast iron, ground and lapped. Connecting Rod type. Case-hardened steel. Crankpin Bearing. Plain. Crankshaft. Case-hardened steel, ground and honed. Main Bearing. Plain Little End Bearing. Plain, hardened steel, honed. Crankshaft Valve. Rotary disc. Max. Revs. Claimed, Airscrew. 9,000 r.p.m. Cylinder liner. Case-hardened steel. **Special Features.** For inverted flying or for use in a control-line model where a larger tank may be necessary, the fitted tank can be

model where a larger tank may be necessary, the fitted tank can be easily removed by taking out the needle and unscrewing the retaining screw under the air inlet tube. The needle is then replaced and fuel lead attached to new tank.

Aeromodeller Analysis, October, 1949.



an advert from the back pages of the annual

# Camouflage

A History of Concealment and Deception in War

While at the RAF Museum Cosford I browsed the second hand bookstall and turned up a hardbound book on camouflage priced £2 and took the gamble.

Nothing to do with aircraft, but I found this predictable and funny: Complementing the land and airborne deception activities, a naval scout unit was formed early in 1945 to operate in the Akyab area north of Rangoon in support of the various amphibious operations that were planned but rarely executed because of lack of resources. It was in one of these inlets lined by mud banks that one of the best English water-colour painters, Vivian Pitchforth, then attached to a Royal Marine Commando unit as a war artist, was asked by the commanding officer to supervise the painting of some assault craft. So effectively did they merge into their surroundings when moored that several were actually missing for some time.

Flying at night called for a different type of concealment and black paint was chosen to reduce reflection from the Moon or searchlights. There's an old joke about a man going into a shop and asking for black paint: *"Do you want light black or dark black?"* 

Well it was a bit like that and tests were done to find the *blackest* black and as it turned out one incorporating Lycopdium spores was the ultimate.



micrograph of Lycopodium spores

Also known as *Dragon's Breath* this fine powder has been used in the theatre and added to fireworks for years.

The book records that, *"Later in the war camouflage of night-fighters took second place to performance, as with day-fighters.* When the matt colour of the Mosquito, for example, was removed, its speed was increased by as much as 15mph."

Could this be true, as much as 15mph just by changing from matt paint to a polished finish? I took my courage in both hands and emailed Prof Mike Gaster – once a top modeller himself.

"Yes roughness is important. Firstly laminar flows tend to turbulent ones more easily on rough surfaces. In fact I have been working on this for some time now. We certainly know that transition can occur closer to the leading edge on rough panels, but I have yet to hear a clear scientific explanation. I think that I am getting there.

But most aircraft have entirely turbulent boundary layers. These are certainly slightly modified by even quite small amounts of surface roughness. It is known to increase the drag by measurable amounts. So matt coatings are almost certainly going to increase drag and I can see why they had to make some choices. I certainly don't feel that one needs to polish a surface to achieve a reasonable performance.

Airbus are now trying to get some small amounts of laminar flow on the leading edges of the A320. It appears that we may be able to get a small drag saving\* in this way. I sold them an invention of mine a few years ago to help with this. It is slow progress but in a few years I might actually see it in use.

Mike G

So there you have it – if Mike Gaster says 15 mph is possible then that's good enough for me.

By way of an aside, the story goes that Mike was doing research on airflow over wings and actually bought and had flown his 'own' Lancaster in the years following the War with wings instrumented to measure flow.

\*Even a drag saving of 1% say may sound small but an A320 holds up to 24,210 Kg of fuel. A back of the envelope calculation suggests that if you can save 1% of that another 242 Kg of paying cargo can be carried, never mind the saving of around £80 on Jet A1 fuel each trip.

Seen at RAF Cosford



the RAF Cosford Mustan

If you joined the trip to Cosford you will almost certainly have seen this superb 1 : 5 scale Mustang. It was made by David Glen and has a twin, a Spitfire on display at RAF Hendon.



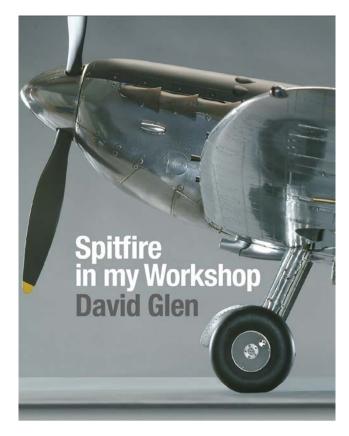
**RAF Hendon's Spitfire** 

The good news is that David has published a book "Spitfire in my Workshop" which goes into detail about the making of the models.



a work in progress

If you would like to know more then follow this link: <u>http://www.spitfireinmyworkshop.net/</u>



David Glen lives in Whaddon, South Cambridgeshire

### the IVCMAC website

www.impmac.co.uk



Six months on and our club website is slowly building with visitor numbers now average over 40 per day.

During the last month Terry King has lent me three of his photograph albums to look through with permission to scan some photos and add them to the website. You'll find I've made a start if you click on the tab: Our Club/About Us







Terry with Brian Golding on hand

In the front of one of these albums Terry has attached his original club membership card. Ivan tells me they were printed

out on a larger sheet and you had to cut them out and fold them yourself. They *just might* have been silk screen printed but I rather suspect a potato played a part.

Inside Rule 2 states, "New Members must build and fly a plane within two months. Failure to produce a plane within the specified time will result in expulsion of member."



There's a page on the website about Ray which contains an account of a visit paid by Doug Gillies and Bill Hannan. After a trip to the flying field, in the dark and occupied by cattle, Bill writes:

Words just cannot do justice to this experience - only those who were there can understand the sterling value... life is for living... Ray Malmström is one of nature's livelier characters and to be in his company is to be truly alive.

I was delighted to find among Terry's photos just the one to accompany this article.



Ray with Vic and Brian among interested bystanders.

# Public Day

models, competitions and the interval talk



Gossamer Albatross by Peter Smart



Garry with Jim Springham's RTP racer

Garry went on to give a demonstration of Jim's own design RTP racer which can be viewed at:

https://www.youtube.com/watch?v=VstZIPnk0ro



Laird Speedwing Junior by Chris Strachan



Ken McDonough's Farman



1931 Laird "Super Solution" racer, winner of the 1931 Bendix Trophy race



14406N

The Interval talk



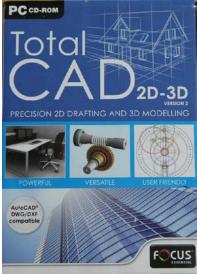
Roger Simmonds gets ready to open the batting

Roger and Rob print their designs on paper before applying it to their models. Your run of the mill printer paper weighs  $80g/m^2$  but they've found stocks as light as  $45g/m^2$ .

They design on computer using software such as:



Piper Super Cruiser - a three channel rc conversion by Nick Peppiatt



Available online for as little as £7.49



A clutch of models using the techniques of Roger Simmonds and Rob Smith

Despite Andy Sephton's heckling they put on a spirited talk, fielded lots of questions and entertained. What more could you ask?



Granger Archaeopteryx

#### Competition results

#### Indigo

1	Bruce Lindsay	750s
	David Leech	581
	Phil Haines	456
	John Wynn	309
	Garry Flack	288 off two flights
	/	0

#### Bostonian

1	Nick Peppiatt	239s
	Peter Adads	178
	Jim/Richard Crossley	169
	Gordon Hannah	167
	Clive Anderson	164
	David Leech	161
	+3 (at least) others not ha	nded in

#### Car Race

1	Andre Bird
	John Court
	Chris Strachan
	sknaB evaD

#### Mass Launch

1 Anne Staines

#### Indigo and Bob Bailey

**Phil Haines** emailed to say, "Just to put on record the great help that I got from Bob Bailey with my Indigo at the Public Meeting last Sunday. He spent a lot of time checking my model and I was really pleased that my last flight, after his help, was nearly 3 minutes duration. I could hardly achieve a one minute flight previously. My model had been nose heavy, and a small amount of blue tack on the tail helped a lot. And he left me with other modifications that need to be done. He also demonstrated his torque meter. I intend to make one of my own soon."

#### SAMS in support



Kevin Wallace lending his support

### IVCMAC visit to RAF Cosford

a grand day out

Well-deserved thanks go to Margaret Staples and John Copsey for jointly organising the visit to Cosford. It was a long day but then there was so much to see.



Lightning F.1 XG337

The museum holds many unusual aircraft such as this T7 below. In 1955 Auster Aircraft Limited modified this two T7s for the 1956 Commonwealth Trans-Antarctic Expedition led by Dr Vivian Fuchs.



Auster T7 Antarctic WE600

These photos were taken by Gotthelf, but here's the thing, he *didn't* carry around his new Nikon camera, just his Samsung smart phone!

The cameras in these phones have really improved by leaps and bounds in the last few years.

### George Medal or Cross

and maybe a coincidence

If you are reading this it is for one of two reasons, either our editor has found it interesting [absolutely! - Ed] or it is because he has not enough good stuff to fill the pages. I suspect the latter; be that as it may I had better get started. Some weeks ago I met an old friend, we had not seen each other for many years. So we spent some time getting up to date with recent happenings but, eventually, we began to rake over some much more distant history. How we got on the subject I don't remember but the question I was asked was, what was the medal old Jack Taylor was given? Jack Taylor, for those who don't know, was born in Ireland and by the time I was acquainted with him he had lived in Newmarket for many years and was the owner of the pet shop in Market Street. He had at one time been a professional footballer and also a very handy boxer. He had been awarded a medal for the bravery he had shown, while serving in the RAF during WW2. A quick search told us he had been awarded the George Medal and the British Empire Medal both after Jack had rescued crew members from two separate crashed and burning aircraft. On one occasion he had been playing football and carried out his heroic deed dressed in his football kit. This started me wondering what one had to do to qualify for a George Medal and /or a George Cross, and was a George Cross only for members of the armed forces and the medal mainly for civilians? It's a real can of worms so I won't go into the twists and turns of what does or doesn't determine which award is given. But my interest was aroused enough to have a look at some of the awards and why they were awarded. One case caught my eye for one very sad reason which I will mention later. It happened on 27th August 1941 at Blackpool. A Blackburn Botha, one of three, of the SGR (School of General Reconnaissance) with two crew and a civilian passenger was flying along the coast. As it approached Blackpool it was "attacked" by three Boulton Paul Defiants of 256 squadron. There would have been four but the flight commander had been recalled after take off. It is not clear if the practice interception was authorised or not. Either way two of the Defiants "successfully" attacked the Botha but, as the third dived to intercept, the Botha turned suddenly and the Defiant cut the Botha's fuselage in half just behind the wing and the two crew members fell into the sea. The main part of the wreckage with the civilian passenger still on board crashed onto Blackpool Central railway station, which was crowded with holiday

makers, and exploded. The Bothas passenger and another eight people in the station were killed instantly and five more died later. The Defiant, with its two New Zealand crew members, crashed onto number 97 Read Avenue and both the crew were killed.



Blackburn Botha

There were several awards and commendations for bravery; five soldiers were commended for their courage at the railway station. Two others were mentioned for their attempts to recover the body of one of the Botha's crew from the sea. Two more were commended for their courage trying to reach the body of the defiant pilot. On 29<sup>th</sup> January 1942 the award of the George Medal to Cpl Thomas Hill was announced. He had entered the fire at the station on three occasions to rescue victims despite being warned that the roof was about to come down. Others, including three police officers, received commendations and small sums of money. The sad reason I mentioned earlier was that four of the fatalities were children, two were five years old, one three years and one two years old. The civilians were buried in their local church yards and cemeteries. The two New Zealanders, Sgt Ellmers and Sgt Clifford were buried in Lytham Park cemetery. P/O Horne was buried at Willesden Jewish Cemetery. The "maybe coincidence" I mentioned is that the second Botha crew member, P/O Sale, is buried in St Andrews Churchyard Impington not more than a couple of hundred yards from where we fly.

**Tony Harper** 

# Peck-Polymer Pietenpol

Gotthelf has a new peanut



K1422. Pietenpol Air Camper. 16"

Price: £4.25

from the SAMS catalogue



I knew Gotthelf was building a peanut because every time I met him he was complaining about how much effort it was taking. So I was intrigued to see the finished model and though small it's perfectly formed.



dummy engine, radiator, rivets even



nicely detailed

### TSR2

what might have been

A number of us stood looking at Cosford's TSR2 for some time. I feel a particular connection having grown up in Preston at the very time that TSR2 was taking shape there.



photo – Michael J Freer

After the trip I looked for more information online and found this piece on youtube:

#### https://www.youtube.com/watch?v=o53u0X0Ik0w

The TSR2 was a technological triumph for Britain; a world beating tactical, strike and reconnaissance aircraft years ahead of its time. It carried four on-board digital computers to process radar information. It could deliver its weapons load to a target 1000 nautical miles away from a runway just 600 yards long. Flying at ultra low level at the speed of sound it would have been able to pass under Soviet radar/air defence screen undetected. It would have been the most powerful weapon in the NATO arsenal. And yet it was destined never to see service. Why?

The fascinating story behind the cancellation of the TSR2 project is one of international intrigue and high stake politics. It ended in 1965 when a 200,000,000 pound aircraft project was reduced to just 50,000 pound worth of scrap metal and the future of Britain as a world leader in aviation was put in jeopardy.

When the order came for the TSR2's cancellation, the prototype, construction jigs, design papers and film records were all ordered to be destroyed. Despite this, unique film material did escape destruction and has remained hidden in vaults - until now.

# You can't beat a good big'un!

well that was John McIntyre's view



John with two Leprechauns, or is that Vic?

To be fair to John, he was planning to carry a camera and back then they weren't so small or light.

When This photo turned up in Terry's photo archive I emailed John to ask what success he had and he replied attaching this photo:



It's a bit hard to make out what's going on here, but one of John's Hills Road friends is giving the Leprechaun a mighty heave-ho with John in the background holding the transmitter. The photo was taken by the sister of the guy launching and moments later the engine spluttered and died. With the huge model diving straight for her she had no choice but to dive herself.

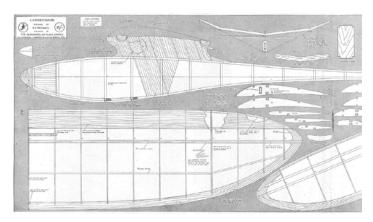
Leprechaun



Aeromodeller March 1950

Everyone knows two things about the Leprechaun: it was designed by R A 'Dick' Twomey and it had a massive chord of around 19".

Although the span was *only* 103" span the wing had a low aspect ratio leading to an area of 1,647 sq.in



Dick Twomey published *Cobra* and *Rebel* in Aeromodeller whilst still at school. John McIntyre built his while at school, but working in *Model Mania* [on King's Street] on Saturdays – just as well as you don't get too many of *those* ribs out of a sheet of balsa. Just as well that John and Leo Bevan got along famously.



Found in Terry's archive, this photo of Dick with Ray and another.

And was it all worthwhile? John found this photo, taken from his Leprechaun over Balsham.

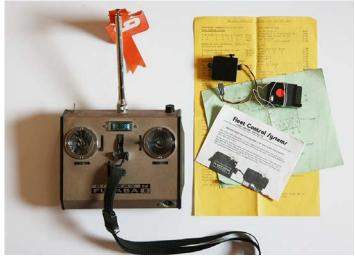


# Make do and mend

Tony Neal reminded me how it was

You know how they love to catch out politicians by asking them, "what's the cost of a pint of milk?" well, how many receivers do you have? . . well, no I couldn't tell you for sure, but it wasn't always like that.

A couple of months ago Tony handed me a plastic bag containing a Futaba Tx, Rx and a servo. The servo and Rx are huge by modern standards but the Tx had a story to tell. Originally 27MHz it had at some stage been converted to operate on 35MHz . . too good to throw away and a 'state of the art' 35MHz Tx too expensive to buy.



Tony's modified Tx, servo and Rx

In the early 70's I had my first teaching job and was into 'radio' as the term 'electronics' hadn't been coined. So maybe it was enthusiasm rather than poverty that prompted me to build my first transmitter and receiver.

Ferranti had a new series of plastic encapsulated transistors, the Ferranti E line, and produced a series of Applications books. My eye was caught by ESA 41 A Six Channel Digital Proportional Radio Control System

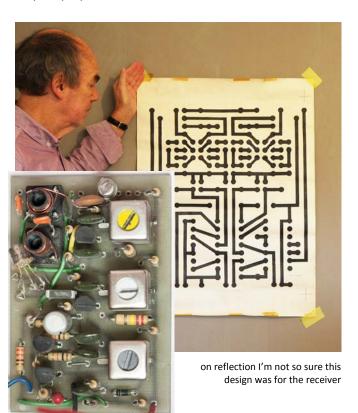
From memory, building the transmitter wasn't so bad but to produce the receiver I needed to design a printed circuit board. Well, I made a start by drawing my design to some scale or other so that when photographed it would fit onto a 35mm film. Later, in the school darkroom I enlarged it onto Litho film at the correct scale.

The board I used came with copper but no photo resist, you had to spray the resist from an aerosol can and bake it in an oven, making sure no daylight or dust reached it. Then you could expose the resist through the Litho mask using the science lab's UV lamp . . later, developing the image ready for etching with Ferric Chloride.

Once etched the resist could be washed off with acetone , the holes drilled and you were ready to start soldering . . simples! As you can imagine this took some time but I was delighted with my first PCB, just the one flaw, it was back to front.

Clearing out the loft I came across my original drawing for the PCB and got out the receiver made from it.

G M H Bunce in Fareham was my local model shop and I wonder now if I ever, unknowingly, rubbed shoulders with my hero Eric Coates who lived nearby. I went along to see if I could buy a servo. They sold me one, made by Simprop, but it contained no electronics.





the Simprop servo with a modern Blue Arrow type

Fortunately the Ferranti application notes included a servo circuit design and I got on with producing a pcb for that too. It all *sort of worked* but it didn't instil confidence and though I built a glider and flew with it you'd probably call it a 'learning experience' as 'success' would be stretching the truth. So much easier now.

# Who's hangar?

working title, "and the door closes"



What this modeller lacks in space he makes up for in ingenuity, and what he fits into this cupboard is nobody's business – the door closes with tolerances measured in mm – but who's is it?

# IVCMAC down under

wonders of the interweb

You'll know Clive Anderson, a regular attender on Saturday afternoons in the sports hall, and public days too. He has a brother Anthony who lives in Australia but uses the web to keep in touch with all matters IVCMAC. Recently he emailed me to say,

Hello Bryan, many thanks for the link to your walk around with the camera. I was just cleaning out my main computer of last week's email and junk collection and saw that my brother was actually on line and about go send me an email so I gave him a call on Skype we were on for nearly an hour. He was telling me about you going around with the camera in the hall and he was most surprised to know that I knew all about it and that I had actually got a copy of it from you and could see all that as happening there and had a quick site of him. I must say that I was most impressed with what I saw and the size of the hall that you have access to! I was really envious unfortunately there is nothing like that near me other than a two hour drive to the other side of Melbourne and that is in the evening. Driving that far at night once you clear the main city and into the suburbs and through into country to Healesville you have the problems of livestock on the roads and I am talking about Wombats that are like small brown bears. They make a mess of your car if you hit one as they are very solid. Also we have large Kangaroo s that give no waning just jump out in front of you attracted by the head lights and can make a real mess of your car, so unless you have no real choice you do not drive country roads after dark. Australia is a wonderful place to live but it does have some strange hazards. Clive and I were actually discussing indoor flying back in the nineteen forties ie 48 or 49, and we were flying rubber powered and as we got into the last of the forties we managed to get battery powered electric flight motor only on board with power supplied by two wire connect and rotary contacts as far as we were concerned very advanced for the times. Bryan if you find that this is of any interest please feel free to use it in your very interesting newsletters, cheers for now **Tony Anderson** 

# The RAF's 100th anniversary

Horse Guards Parade

To mark the anniversary they brought together a Eurofighter, a Spitfire and Sopwith Snipe to Horse Guards Parade.



Getty images

You can find these images and more on the Mail Online pages.

Following on from the Royal Flying Corps the RAF came into being on April 1<sup>st</sup> 1918. We're still some way off that date so maybe we're in for a treat as various celebrations of the anniversary are staged.

### Brian Golding



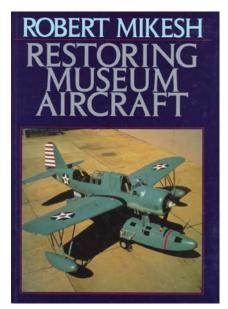
Brian working on the Auster

There was a time when this newsletter owed its existence to Brian's hand addressing of the envelopes and posting them off to rather more members than we have currently. He spent National Service in the RAF and as an aircraftsman survived bailing off the wing of a DH Vampire that began its take off run with Brian still aboard the wing. Later he worked in the university's botany school as a mycology technician. He grew bananas as a 'homer' in the university's green houses. Deeply interested in botany he spent years working on the illustrations for a book about the flowers of southern France, taking the photographs he worked on during summer cycling holidays with friends. He was a great friend of Dr Dennis Sharman and could often be found visiting the McIntyre's. There he made a deep impression on a young John McIntyre who would spend many evenings watching Brian paint or making models. For many years he volunteered at Duxford, helping to restore a number of aircraft. The list includes a Britannia, then a DH Comet jet airliner, after that a Blenheim, Miles Magister and

David Miller's Auster. I'm told he always worked logically and meticulously, seeming to have an intuitive ability and knowledge of materials and the best way to deal with the many and varied problems that showed up. Brian was a fine aeromodeller but also so much more.

#### Another Cosford bargain

For a fiver I picked up this excellent book on the way they go about restoring museum aircraft and the decisions they must reach



There's a heart-breaking photo of the sole surviving Bristol Bulldog which crashed at Farnborough and which raises important questions about when to fly. Free to borrow if you're interested.

### Footnote

a comment or two from the editor

There comes a time when you have to catch up on decorating, a job I hate and which seems to take forever. However I was inspired by Andrew Hewitt's talk and will be aeromodelling again soon. Already busy with the research.



a very friendly cat, just not ours

The many fans of *Butters* may like to know that this versatile cat has a handle on decorating too, even if he gets confused by dust sheets.

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



Who's hangar - well that would be Richard Staines

Why does Dave Bank's name appear backwards in the results of the car race? Sorry, couldn't possibly explain, let's just say it's a wind-up.