Impington Village College



Model Aeroplane Club

Founded in 1946 by Ray Malmstrom



May June 2014

Edited by Bryan Gostlow Distributed by Tony Harper

Malmstrom Madness at the West Australian Model Aero Club

by George Car



L-R Gary Dickens (Sky Gypsy - last year's winner), Jaime Herder (Skyrida), George Car (Brigadyr), Mike Butcher (Mimi), Ian 'Dicko' Dixon (Mimi), Adrian Dyson, Ted Price (with the open rubber job), and crouching, Chris Edwards (1.5 times Step-Up), Greg McClure.

George writes

When I moved to Perth, I found a small but active old timer club (WAMAC) with a strong focus on RC events, but also with an interest in FF power models - the issue is the FF field is excellent, but 160 km out of town. There is, however, a reasonable field for sports ff within a few km of the WAMAC field, so I organised a couple of events for, as Ray would have it, flying friendship and fun. The first was the Malmstrom madness in March mass launch (then an ebenezer mass launch in April). Both were a lot of fun last year. We will have the Ebenezer mass launch on 20th April.

Why the choice of Malmstrom designs? - well, they certainly are characterful! wide choice, too (most here use small diesels, only 1 rubber job - and though I did build a CL job last year (the sputnik, complete with a pic of Laika in the porthole) - I only managed a few laps (CG too aft) before the inevitable......
I dreamed up a tea cup trophy - as anyone winning it was surely spending too much time drinking tea and not model flying....

Gliding at Gransden? asks Margaret Staples

Anyone interested in gliding and who would like a flight in a glider at Gransden airfield please contact Margaret Staples. I will be collecting names at each Friday night Model meeting. The date will be decided later when I have sufficient names to make it worthwhile.

H/L and catapult Glider Competition

Bruce Lindsay reports

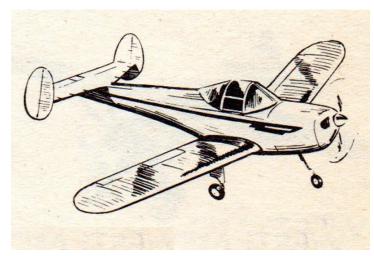
The Friday before our 'Sunday do' appeared to be a quiet night with less than the normal attendance and even fewer Gliders around of which I saw one break in two after landing. No one seemed to want to get going.

Clive King started proceedings with a good demonstration of how it should be done with consistently good flights. His best three of five flights adding up to 49.81s. I tried next but my best only gave 33.98s. Chris Strachan was very inconsistent probably due to his arm still not completely better but managing to get 22.13s. Thanks to Margaret Staples who always gives a very helping hand doing the timing.

1st Clive King 49.81s Bruce Lindsay 33.92 Chris Strachan 22.13

The Interview with Gordon Hannah

My aeromodelling career started at boarding school when I recall watching senior boys flying control line models in a field outside the junior school (that was for the under 12's including me). Later, in the senior school I was fascinated by one boy making a KK Ercoup in the house day room. Later I managed to get into the very restricted aeromodelling club. Amazingly there was no supervision at all – we were left entirely to our own devices with our own clubroom – heaven!



I made and flew all sorts including the school's first R/C model, a Junior 60 with an ED Racer up front and a useless R/C system manufactured by Triang. This had a system of fiddling two knobs on the receiver to tune it, but it would stay on tune for a limited time – generally half way through a flight. After that it was a free flight Junior 60. That brought about possibly may hairiest modelling experience; the said errant model landed a couple of fields away among a herd of inquisitive cows. Mindful of the reputation of cows and their liking for diesel impregnated models I rushed in to collect same before it was too late – to be confronted by a somewhat annoyed bull who I appeared to have disturbed. By this time I had already picked up the model and beat a very hasty retreat.

Model making has been more or less continuous since then. A brief pause, but not complete stop, during my university days and flat life for a year or two afterwards was followed by serious modelling after marriage and first house. This was in St Albans in the 1960's when I was secretary and chairman of the then very successful free flight club with a representative in the English team for the world champs for about 12 or 15 years on the trot.

Coming to Cambridge in 1977 I joined IVCMAC soon afterwards, but I forget precisely when. Limitations in time (I had just started my own business) meant that flying days were limited so I became interested in the indoor scale scene as this meant I could reserve a date to fly knowing that the weather wouldn't spoil my day out.

What modelling tool would I not do without? Probably my scalpel and tweezers – not because of their use but they were my father's who was a GP and I often wonder just where and what they did before I had them!

May favourite model / aircraft – the Westland Lysander. The attached photograph taken 40 years ago shows my kids holding my free flight effort (again ED Racer up front). It had one dramatic flight at Bassingbourn. More recently I made the little KK version – with my own wood and prop. To my and many others amazement it flew straight off the board, giving my many fine flights before disappearing over the hedge at Old Warden. If you ever go to Tempsford and visit the creepy barn where the spies saw their last of the UK before taking off for France, you can almost feel their ghosts and the Lysander taking off.



Otherwise I go for any model which inspires me. This may be a vintage pre WW1 machine or a 1930's racer. There's no doubt my happiest moment is deciding on the next model. There is such a huge range and despite experience I am the eternal optimist as to whether I can make it fly. I will shortly get my come uppance when I try to aviate with my latest creation — a twin rubber powered free flight Douglas Havoc (the American

version of the Boston). This is from an atrocious kit I bought at the club auction in a mad moment. Talk about a challenge.

What about the future – I haven't got to grips with carbon fibre or electric motors, but am endeavouring to do something about the latter this winter. Despite loving the smell, noise and general ambiance of the diesel engine the advantages of the modern electric powered R/C model cannot be ignored, so I am proposing to give it a go.



Also I would like to work my way through the old Keil Kraft and Veron scale models and see if I could make them fly. So far it is about 4 good and 2 bad.

Despite having a super workshop, which is always a complete mess, I do a lot of my building on a card table in front of the television – alongside Carolyn who is busy with her lace. The workshop does have other uses as over the last 10 years I have done quite a lot of wood turning – another hobby with quite a wide range, more that you would think. Otherwise playing golf once or twice a week, working as a town guide (busy in the summer tourist season), doing charity stuff with the Rotary Club and doing the odd job in the garden or for the grandchildren keeps me quite active.

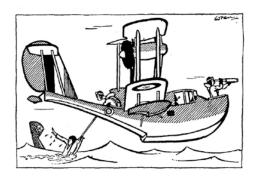
So that's about it. I could never achieve the level of modelling of someone like Clive King as I am far too impatient and could never apply myself with the same skill and dedication to achieve his standards. Arthritis is getting the better of me for doing delicate work so the once hoped for ambition of indoor duration will now never be achieved. But there is such a lot more to look forward to.

Looking Up

a report from Tony Harper

Only two or three notable sightings since the last issue and of these the sighting on Feb 13th was by far the most spectacular. But first, on the 3rd of February a Boeing C40A Clipper was seen. It is based on a Boeing 737 medium haul airliner and is used as a logistics support aircraft for the United States Navy. The nearest USN base is in Keflavik and I presume this is where it came from or was going to. It did a couple of approaches over Ely landing after the second. I can't remember what I was doing at the garden but a little before midday on the 13th I heard an almighty roar which, I must confess, startled me. It's a long time since I heard a "racket" of similar proportions and such was the volume that I didn't need to search for the source, I couldn't miss it. It was a North American Rockwell B1B "Lancer", the swing wing bomber. It was low, fast and very noisy and as I watched it banked to head North East and as it did so it began to swing its wings. In a few moments it was just a speck in the sky but the sound seemed to hang around for minutes.

About a year ago, maybe a little longer, I saw another on the ground at Mildenhall it had some sort of electrical trouble and was awaiting repair. Apparently it was the same problem which brought the second to Mildenhall this year. My last sighting of note was a C17, these are not unusual I have seen them many times and I have include them in what I refer to as the usual suspects list along with KC135's and the Hercules. What made this one different was that it belonged to the Kuwaiti Air Force. Now, I would have expected it to have some sort of sandy coloured camouflage but no, it was painted white upper surfaces and a sort of medium grey under. It sparkled a bit so it might have been new or freshly painted. Apart from these there has been nothing to speak about only the "usual suspects". The same comments apply about civil and light aircraft although on Saturday morning just gone I saw the Classic Wings Rapide for the first time this year and this never fails to give the day a lift.



The time has come, the Walrus said, to talk of many things, of pusher props, and shagbats, and strutted swept back wings. I'm an aeronautical wonder, but if that's not enough, Then I've wheels that I can land on, when the sea's a bit too rough

New tricks for old dogs

Adding detail – Ken Bates, John Whatmore and Tony Johnson

Frog Pup by Ken Bates

Ken used fine tissue and an inkjet printer to produce tissue transfers which he applied directly to the balsa by doping through.

If you're thinking of buying a new inkjet then EPSON are said to have the most colourfast inks.

Auster J4 by John Whatsmore

John used software to draw the whole fuselage side before printing onto tissue. He then applied the tissue to the balsa profile in the usual way.

Hall-Springfield Bulldog [Tompson Trophy Racer] by Tony Johnson

Tony begins with published drawings and scans them before printing onto regular paper at the size/scale he wants – the sort of thing you could do with a photocopier. Then he overlays coloured tissue paper and traces directly onto the tissue with pens. To help with registration he suggests avoiding outlines, "just let the lines run off and trim the excess after covering".

These excellent three were seen at the Public Meeting in March

The *Crafty Computer Paper* people make waterslide decal paper you can print yourself: white or clear, inkjet or laser

Chalking Tissue by Scot Dobberfuhl

If you've built and covered a couple models, you know that Japanese tissue comes in a very basic range of colors. Worse yet, white Japanese tissue becomes transparent beige when that first coat of dope hits it. That's just fine for a Pioneer scale model, but less than ideal on a Mr. Mulligan. While airbrushing represents an obvious solution to the Esaki dilemma, it's also potentially messy, time consuming, and expensive. Fortunately, there's a better way. With a set of soft pastels, you can transform the standard seven tissue colors (red, orange, yellow, blue, green, black and white) into a staggering array of colored tissues, ranging from pale blues and grays to shocking shades of purple and chartreuse. Thanks and acknowledgements go out to Chris Parent, for discovering and perfecting the majority of the techniques outlined below, and to Larry Marshall and Rich Weber for sharing their chalk expertise with me.

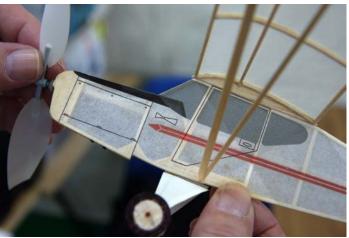
For more information follow one or other of these links:

http://www.easybuiltmodels.com/chalk.htm

http://www.pensacolafreeflight.org/page5/assets/ArtistChalkPaintMatching.pdf



Frog Pup



Auster J4

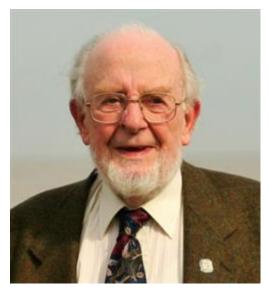


Hall-Springfield Bulldog

Maurice Reynolds 1924 – 2014

Chris Hinson remembers

Our friend Maurice Reynolds of 'Ren-models' died on February 20th. He was 90 years of age and will be greatly missed by his wife Margaret, his family and friends.



Maurice was well known for his charitable work including 'Headway', the organisation for people recovering from brain injuries. Five years ago, he received its lifetime award in thanks for his work over two decades.

In 1972, despite having three teenage children, Maurice and Margaret decided to become foster parents and during the next 18 years they gave a foster home to 15 youngsters.

When Maurice left school in 1940 he worked in Lloyds Bank in Sydney Street and also joined the Home Guard.

In 1942 he was now old enough to volunteer for the army. In 1944 he took part in the D-day Normandy landings and later saw action in Belgium and Germany. He was finally demobbed in 1947.



When he returned to Cambridge he joined the family company 'Renbro'. This was started by Maurice's father who had been a licensed Marconi radio operator in the merchant navy. When Mr Reynolds senior retired Maurice and his two brothers became directors and took over the business. Maurice handled the accounts department, his brother Colin was in charge of the radio and TV sales.

I first met Maurice way back in 1954 when I was at school (Impington VC) and when I joined this club (I've been a member for 60 years!) I started to go to Renbro's in East Road for my kits and model supplies.

Half of the Renbro's shop was dedicated to modelling and was run by Maurice and an assistant called Sid. I visited the shop most Saturday mornings and met other friends there. It was almost like a club!

One Saturday just before Christmas, Maurice asked me if I would like to work in the shop on Saturdays over the busy Christmas period. I said yes and my 'temporary' Saturday job lasted for well over 10 years! During this time the shop moved to Mill Road, as the East Road shop

was to be demolished to make way for some blocks of flats. Sid had left to become a bandsman in the RAF. he was replaced by Vic Holloway who stayed for a few years and then Alan Thompson replaced him.



The model section then separated from the TV shop and moved to 63 Fitzroy Street and became 'Ren-models'. After a few months I left my job at Wesley Coe (Cambridge) Ltd and started full time at Ren-Models as assistant manager and was there running the flying models and model boat section for approx 5 years.

Shortly after I left the model shop moved to Burleigh Street as that section of Fitzroy Street was to be demolished to make way for the Grafton Centre. After a while the model shop moved back to the Mill Road shop and unfortunately later both Renbro's and Ren-models closed down.

Alan Hunter adds

Maurice was a gent and there is a photo of him in Ray Malmstroms Eagle book of Model Boats holding a Veron Veronica model yacht. Saturday afternoons in there was like an extension of the Club. When the shop was at East Rd and I was about eleven years old there was a chemists nearby called Masons in Burleigh St that were happy to sell me ether and amyl nitrate - all in ground glass stoppered bottles. Try asking for that sort of stuff these days!

Great covers

Aero Modeller December 1970



Walter Reger's Boeing P-26A

Re the Boeing P26-A Peashooter - This plane, from the early thirties, was the first American all metal fighter - from an era when there were many manufactures producing individualistic designs - its service life was very short however because of the rate of design advancement - it went into service only three years before the Hawker Hurricane first flew - for me though, it has "style" and this colour scheme is most fetching - makes a superb model.

Alan Hunter

Club News from the *same* Aero Modeller

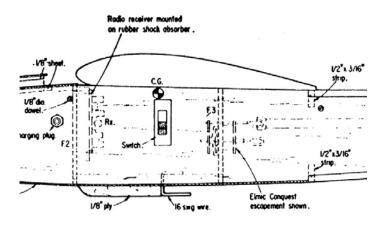
By way of a change I thought I would start off this month by taking you on a round-the-airfield tour at one of our major model meetings. The meeting in question, the **South Midland Area Rally**, held on a sunny Sunday in September at the well-known and spacious field at Cranfield, has inherited some of the traditional club excursion atmosphere with which we used to associate the old **All Britain and Northern Heights** Galas. Quite a number of clubs had turned up in force, most by private car, and others by more collective forms of transport. Some clubs had just come along to enjoy all the fun of the flying fair, whilst others were evidently highly geared for an intensive contesting foray. Typical of the former was the Impington Village College M.A.C. under the genial aegis of artist and model maker Ray Malmstrom. Though perhaps, not too typical, as they made a quite unusual contribution to the sideshow aspect of

the rally with a fine collection of vintage models. One was a true vintage machine, and not a modern copy, was a *Flying Minutes* Wakefield, dating from 1937, and still in good flying condition. Another pre-war model, which many of our older readers would have recognised, was a pre-war Kanga Dragonfly Biplane, finished like *Flying Minutes* and many pre-war machines in plain white tissue. For the engine spotter there was a Movo Diesel obtained from Italy at the end of the war – and a good-looking engine, too. The fly-for-fun club approach is typified by *Imp*, the small, radio-controlled club field glider by member T. King which



was featured in the October Aeromodeller.

Terry's plan for the Imp can be downloaded from http://outerzone.co.uk/



You'll see from this detail that, if you're going to build it, then you'll need an *Elmic Conquest* escapement . . see below

Online connections





http://www.mccrash-racing.co.uk/sc/sc.htm

Ask a man who knows

we ask Chris Strachan, "How do you trim Ray's Canards and Pushers?"

Ray was never afraid to be different and all his models had something special about them. Whimsy, novelty, invention or devilment – call it what you will. They were all good fun and all have that certain something. The canards and pushers are a special sub-group and I like to think that Ray came to their rescue when, at least in the world of small model aeroplanes, they were thought to be difficult. That is not to say that Ray was the only one to get to get them to fly. Indeed in the real world of full size flight it can be argued that it all started with Canards and right up to today there are those who believe that tail first is the Wright way to fly! Ray did however have an exceptional ability to get things to fly that many people regarded as difficult.

I would like to do this article in two parts and in the first one I will look at Ray's canard designs, comment



on those that we have available to us in the flesh (or balsa) and think about what lessons are to be learnt from them. In the second part I would like to look at canards and pushers in the wider worlds of models and full size and see what I have learned from reading about them followed by building and flying models.

When we started looking for Ray's canards we found about half a dozen but careful looking through the bibliography has come up with 11 published designs and a further 7 unpublished from his sketch books.

Malmström Canard and Pusher designs [all are Canards unless indicated otherwise in notes]

Catalogue number	Name	Published in	Publication date	Notes
13A	Featherfly	Aeromodeller	Dec 56	Pusher rubber
16a	Goldwinga	Aeromodeller	Mar 66	Pusher rubber
25A	Candice	Aeromodeller	Apr 72	Pusher rubber
28A	Canair	Aeromodeller	Jul 77	Pusher rubber
20MA	Quickee Canard Glider	Model Aircraft	Apr 62	Glider
1 MM	Marquita	Meccano Mag	Oct 64	Pusher rubber
17 MM	Saab A37 Viggen	Meccano Mag	May 67	Pusher rubber
18 MM	Saab A37 Viggen	Meccano Mag	Feb 69	Glider
4AAM	Tail Up	American Aircraft Modeller	May 71	Pusher rubber
9 E	Moon Rocket	Eagle Book of Spacecraft Models		Catapult glider
13 SCM	Tail First Airliner	Space Craft Models		Glider
6 UM	Canard-Air	Unpublished		<u>Tractor</u> rubber
1 UM	No name	Unpublished		Pusher, not canard
36 UM	No name	Unpublished		Pusher IC moto
50 UM	No name	Unpublished		Pusher, not canard
62 UM	No name	Unpublished		Pusher rubber
72 UM	Lockspieser	Unpublished		Pusher rubber
104 UM	No name	Unpublished		Pusher rubber

For illustrations of all these models (and many more) refer to the Ray Malmstrom Model aircraft Bibliography on the club website at http://www.ivcmac.co.uk or, if you want to go the long way round, at www.nswffs.com.au/malmstromcatalogue.pdf
At the moment we have 6 of these built so there are 5 more to be built if we are to have a complete set on show at our next public meeting in November, not to mention the other 7 unpublished designs which might provide further inspiration.

Individual design comments

CANAIR

A rather lanky model and with its thin sheet wings and perhaps it is not the most durable of Ray's designs. This example was built by Bruce Lindsay some time ago and he remembers it flying well.

MARQUITA

This example was built by Doug McHard and presented to Ray. It still bears an inscription on its tail commemorating the occasion. As usual from Doug it is very nicely built and I am sure flies well.





It has Ray's standard design layout for a canard of zero incidence on the rear wing and 3 degrees positive on the canard foreplane. There is about 5 degrees of downthrust. Centre of gravity is at about 50% of root chord in front of the mainplane. My confidence in its performance will be tested when we are outside on the playing field.

VIGGEN

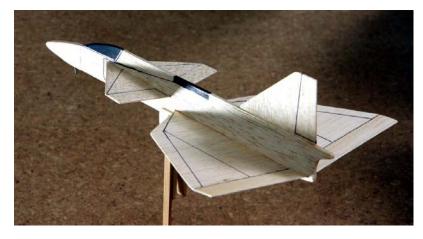
This is the built-up rubber-powered VIggen and was built by John Valiant. When asked if it had proved difficult to trim he said "Oh no, flew straight off the board". This is one of the difficulties in commenting on the trimming of Ray's designs – most of them are so good that they do not need much!

It is reasonable to ask whether the Viggen is really a canard. Certainly the main book I have on canards includes it as a canard but also describes it as a "Double Delta". The full size is controlled in pitch on landing and take off by using a combination of a trimmable flap on the foreplane and the elevators and ailerons on the mainplane. The model has adjustable elevators (combined with the scale ailerons on the mainplane which provide pitch adjustment but the foreplane has no adjustment.

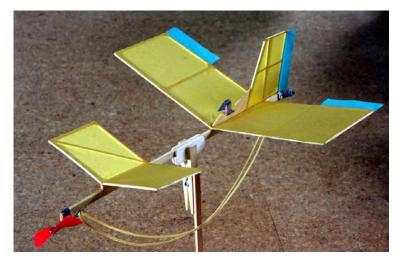


VIGGEN

This is the all sheet glider version built by me. Just like the rubber-powered one it flew straight off the board.



The control surfaces on the trailing edge of the main plane are large and give strong pitch control. However they need to be carefully adjusted adjusted to get it to fly straight. I intend to see how it will go as a high-powered catapult glider, when I expect to find that I need to fix Ray's controls and use very small tabs and the fin to trim. I will report in part 2 of this article.



CANARD-AIR

This is a super little model and both Bruce Lindsay and I have built examples which fly well. It is an indoor model with single surface wings and I will name it as the competition model of the November 14 meeting. It will be interesting to see what performance people get out of it.

TAIL FIRST AIRLINER

I built this one and once again it flew straight off the board. No adjustable tail surfaces but warping the fin controls the direction nicely. I intend to give it the same catapult treatment as the Viggen and see how I get on. I suspect the fairly high aspect ratio wing may give trimming problems at high speed but we will see the result on the playing field as in Part 2.



Summary:

Ray as ever proves to be a truly great model designer. What was his secret? Ability, enjoyment and dedication to making sure that his designs performed well and gave pleasure and satisfaction to those who built them. His canards provide good examples of this and he arrived at design parameters that really work. The lessons we can learn from this is that if we build reasonably well to a good design (and all of Ray's are good) then

little trimming will be needed to create a good flyer. In the next section I will talk about my experience with scale canards and pushers and look at their strengths and weaknesses. There are a lot of full size canards out there but few of them have achieved long-term success. I will discuss why that may be and see what can be learned from them.

Ray Malmstrom Cup, Sunday May 11th

John Copsy writes

As I believe you are aware, the club is hosting a National Control Line Aerobatics

(F2B) competition at Girton on Sunday 11th. May this year. We have now received confirmation that some of the best Stunt flyers in the

country will be entering. These include several international flyers, for example :-

Pete Tindal (ex European Champion). Glen Alison (International flyer).

Club night Friday 9th May 2014

Something special to interest the club members who have an interest in Control Line flying, either as current flyers or just those who 'remember the old days':-

As a taster to the main event, some of the competitors will be coming to the club meeting on the Friday preceding the competition (i.e. 9th. May 2014).

Roy Cherry (British team member).

Barry Robinson (British team member).

Brian Turner (ex International Flyer and IVC club member. John Benzing (generally agreed to be one of the best in the UK).

And as they say - many many more ! (well, about 10 more actually).

There will also be a second competition for less skilled flyers with Profile models if there is sufficient interest.

They are coming as honoured guests and to give demonstration flights on the sports field that evening.

Pete Tindal will be flying his electric "Yatsenko Shark" and Steve Foster will be flying his "Under Pressure" with piped motor

Snapshot

we visit **Tony Harper** "A view from the workbench"



Understandably perhaps, it has been hard to persuade people to take pictures of their workshops. After all it's a very personal space. I was thinking of dropping this item and said as much to Tony who replied, in so many words, "don't give up just yet - I'll take a photo for you."

The thing is, having seen Tony's wonderfully tidy workshop, I can't see anyone in the future agreeing to having a photo of theirs in the newsletter. [Ed]

How things were

RTF back in the days





Former club member **Lewis Stone** has this FROG Single Seat Fighter (Mark V) which he aims to restore. The winder is built into the box and engages directly on the prop. Lift out the model and launch . . doesn't get much more *Ready to Fly* than that!

the one not flapping is a Simprop Excel 4004 – that's 4.004m

make your own mind up about the size of the sea eagle



photo supplied by Adrian Morgan

Adrian is a friend of John McIntyre and has a blog:

http://highlandrcglidingclub.blogspot.co.uk/2014 02 01 archive.html

Midland Air Museum - the 2014 club visit

Margaret Staples writes



A visit was arranged for 8th March this year for club members, family and friends. The weather was fine but rather blustery however we soon forgot about the cold wind when we saw the aircraft. We were divided into small groups and escorted around

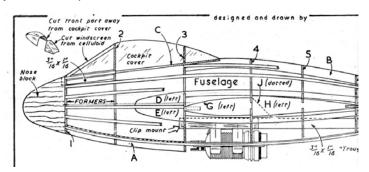
by members of the museum. They explained where the aircraft had come from, how they got to the museum - some very interesting and hilarious experiences - and the aircrafts previous history.

In the hangar there were a number of light aircraft, also engine parts and various cockpits that were available for folk to sit in and imagine you were way up in the blue yonder! There was also an excellent display of model aircraft and cars. The shop was very well stocked and I noticed a number of purchases

being made. The Cafe was adequate but wisely some members had brought their own packed lunches! I think a good day was had by all, we even had a very comfortable coach this time. I now look forward to suggestions for the outing in 2015.

Before you can make one

first somebody has to draw it



No prizes for guessing it's the Venom but who designed and drew it?

John Bygrave and his planes

Who will forget John's account of sneaking a Turbulent up the A1 or the time he started it up without chocks and it nearly got away from him?

Come back soon John and tell us more about how you make them.



Quick tip

Google Earth's Historic imagery button



A feature of Google Earth you might have missed, which lets you scroll back through a few decades, though it rather depends on the availability of images.

Search for Bottisham, say, and go back to 1945 to view the old airfield.

Footnote

A comment or two from the editor

Someone, I don't know who, whispered in Tony Harper's ear that they would like to see, "more Malmstrom" in the newsletter. Always happy to oblige. If *you* have any ideas about articles you'd like to see written or whatever then don't hesitate to have a word.

As the Dog of Destiny cocks his leg against the electric fence of Fate . . the April Fool special issue died a death – oops

A sincere thanks to everyone who's contributed to this edition and the usual apology to those who won't see their pieces this time around.

I'm open to offers if you have a workshop to photograph or an interview to give, a favourite Aero Modeller cover or some new trick to pass on to us old dogs.

The Venom was

