Clear Dope

October 2025

The Chair

Derek Honeysett

Welcome to the October edition of Clear Dope. I am writing this on a wet Sunday morning from my motorhome at Flamborough Head. The Autumn weather so far has not been too bad and it looks like there is still lots of flying happening. We have had great weather in the Spring and Summer with plenty of flying.

I have managed to fly a reasonable amount this year, although a few of my models still remain in the hangar having never been flown - including a 3m Veron Cobra slope soarer, B52 Stratofortress power scale soarer, and the one I keep getting a lot of stick about, the F104G Starfighter EDF, especially as I took it to the Army Summer Fete. I often get comments such as “It’s perfect today for the Starfighter; when are you going to fly it?”. I shall surprise you all one day when it appears at Thorney.

This year, I have made the decision to gradually move from I.C. to electric; having flown I.C. models since I was fifteen, I feel this is the way forward for me. This is not something new, as I have a few electric models, and will continue to fly the I.C. models that I possess. My last I.C. model, a rare Kyosho Oxalys, will be completed over the winter.

I hope you enjoy this edition, and look forward to catching up with many of you over the coming weeks.

B52 Stratofortress built from a plan by ex CADMAC member Mike Callow, given to me when he moved to France. It still remains unflown in my ownership.

Editors notes & Club News

A huge “Thank You” to all those who have contributed to this issue of CD!

The next issue of CD is scheduled for early December; deadline for submission of articles is **30th November**!

Articles may be sent in any format to:

fsdibden@gmail.com
robin.colbourne0@gmail.com and/or
editor@cadmac.co.uk

You might like to consider build articles, repairs, model reviews, 'I learnt about modelling from that' ... the list is endless. We look forward to hearing from you!

Best, Fraser Dibden & Robin Colbourne

Goodwood Flying Evening

This year’s Goodwood Flying Evening was held on 7th August. Despite a terrible weather forecast, and what turned out to be a grey and windy evening, the event was well-attended with an extensive amount of flying. Several newcomers were attracted by the event, with some buddy-box trials carried out.

Goodwood Pilot Briefing

Goodwood Pits and Pilot Box

Thorney Families Day

The Army Families Day at Thorney was held on 13th September. Another event well-represented by club members, with a great static display of models.

Glider Competition Part 1 (E-Glider) — Derek Honeysett

Historically, CADMAC has held a series of gliding competitions over the summer months; three competitions with scores amalgamated, meaning if you attend all three your chances of victory are increased. Initially these competitions were bungee launched gliders, although in later years as the availability of electric gliders increased the E class was also introduced.

Saturday 9th August saw the first of our series of three gliding competitions. The weather on the day was sunny and warm, however there was a strong south westerly breeze that was forecast to get up to 17mph later in the afternoon.

It was agreed to start the competition at 1pm, allowing conventional models to be flown in the morning; a decision that was reinforced by the fact the farmer had not cut the grass therefore eliminating the use of the bungee.

Ten competitors entered. The wind when we started was around 14mph, so we all thought that there would be no thermal activity and generally little or no lift - how wrong we were!

Adrian was first to launch with his new 3.5m Friendly F5J and returned a score of 6m 02s, which proved to be the highest score on that round. That said, Robin put in a respectable time of 4m.32s with his Radian Pro.

Adrian launching his winning model

Whilst preparing for the first round Declan crashed his 2m Palio glider, damaging the nose, and in the words of Declan, caused by "total pilot incompetence!"

Round 2 the times were getting better: Adrian managed 10m, Duke scored 6m 46s with his Adventure, and Ken Smith managed 4m 52s with a very nice looking glider that none of us could recognize. Phil Howard-Smith and I managed 4m 23s and 4m 17s respectively, using standard Multiplex Solius 2m gliders (Phil's used to belong to Malcolm Farrington), and Tim managed 4m with his Aggressor which does not have the greatest span.

Round 3 saw Adrian achieve only 5m 27s; however Ken Smith returned 8m 57s and Phil 5m 15s, so maybe there was some lift about after all.

Round 4 started now with a keen wind: Duke scored 8m 53s, Robin 5m 35s and Adrian 7m20s.

By this time I had launched my Solius and headed out to where I thought I might get some lift. I had a good climb, and once the motor had cut I trimmed to hover into wind. The model did not seem to come down, and in fact it started to climb and carried on climbing. It's in these situations when you are flying a model with no air brakes nor crow you start thinking 'how am I going to get this thing down?'. I stuck with it, and it did start to come down slowly. Somebody said 'follow that bird' which I did, and started to climb again. I milked the flight, aiming for 10m, however did not quite make it and scored 9m 48s.

Although the conditions were a bit windy and some competitors struggled with the breeze, the feeling was that the afternoon was a great success.

Declan, Derek, Phil & Adrian

Dave Hayward managed some consistency with his lightweight Milan, Ken Knox had slightly too little power for the windy conditions.

I am pleased to say that Declan's Palio was repaired and test flown ready for the next competition.

Scores and positions are shown below (best three rounds totalled).

Name	Model	Round 1	Round 2	Round 3	Round 4	Total	Position
Adrian Childs	Friendly f5J	6.02	10.00	5.27 ✖	7.20	23.22	1
Duke Benson	Adventure	4.04 ✖	6.46	4.25	8.53	20.04	2
Ken Smith	Unknown	3.13 ✖	4.52	8.57	4.37	18.26	3
Derek Honeysett	Solius	3.12	4.17	2.48 ✖	9.48	17.17	4
Robin Colbourne	Radian Pro	4.32	3.45 ✖	4.08	5.35	14.15	5
Phil Howard-Smith	Solius	4.12	4.23	5.15	3.27 ✖	13.50	6
Tim Kerss	Aggressor	2.49 ✖	4.00	3.31	3.58	11.29	7
David Hayward	Milan	1.55 ✖	3.20	3.43	3.13	10.16	8
Ken Knox	Aeromaster	2.00	2.16				
Declan Cousins	Palio						

If you haven't tried gliding, you really should come and give it a go. It is totally different to conventional flying, making it a great change, especially the bungee-launched gliders.

Peter Doe Aerobatic Competition — Derek Honeysett

Those of you who knew and have flown with Peter will know that he loved nothing more than flying aerobatics, more often than not with his white, green and red Giles.

The committee decided that we should hold an aerobatic competition in memory of Peter, and it would be held on the Sunday of the August bank holiday weekend. We agreed to run separate classes for A and B certified pilots, and I came up with a list of aerobatic manoeuvres that pilots could choose from. However, there were mandatory manoeuvres that had to be flown in each class, including the horizontal figure of eight.

Sunday August 24th was sunny and warm with a moderate south east wind and eleven CADMAC members turned up to compete.

The Competitors, plus Peter Doe's Chipmunk

The day was not without its drama though. Duke had brought along Peter's Obsession model as a fitting tribute to his friend, and on a practice flight a strange sound was heard from the model similar to aileron or elevator flutter. Duke skillfully brought the model in, only to find the fuselage had almost broken in two. Duke was heard to say "I bet Peter's up there laughing at us!"

Pilot Briefing

This was not the end of the drama; again before the competition Fraser had a propeller failure on his Extra, resulting in his reserve model coming out from the car to enable him to compete.

Two rounds were flown and here are the options chosen and the results.

B Certificate Pilots compulsory manoeuvres:
Takeoff, Horizontal Figure of Eight, 2 Consecutive Rolls, Outside Loop, Landing.

Name	Model	Compulsory Manoeuvres	Voluntary Manoeuvres				Total
Adrian Childs	Angel 50E	9 9/ 8 9/ 9 10/ 8 9 / 8 10	3 Spins 10 10	Stall Turn 9 9	Square loop 9 9	Knife Edge Pass 10 9	164 1st
Jeff Cosford	Extra	8 10 / 8 8 / 9 / 9 9 / 6 8	Inside loop 7 10	½ roll inverted 9 9	Square loop 7 8	4 point roll 8 7	148 2nd
Derek Honeysett	Wind S	7 8 / 9 7/ 8 8 / 6 7 / 10 10	Cuban eight 6 7	2 reversals 8 8	Square loop 8 7	Triangle loop 9 7	140 3rd
Fraser Dibden	Own Design	7 6 / 8 8 / 7 5 / 8 6 / 9 4	Cuban eight 6 6	3 spins 8 7	Stall turn 6 6	Avalanche 6 6	119 4th

Adrian receiving 1st prize

Jeff with 2nd prize

As you can see from the scores the B Certificated pilots gave it everything and there were some impressive scores. It is worth mentioning that Fraser, although coming fourth, was not using the model of his choice and still returned a credible score. Those of us who witnessed Adrian's knife edge passes can only dream of flying like that although it does make you more determined to improve your flying.

A Certificate Pilots compulsory manoeuvres:
Takeoff, Horizontal Figure of Eight, & Landing.

Name	Model	Compulsory Man-oeuvres	Voluntary Manoeuvres					Total
Tim Kerss	Olympus	9 7 / 8 7/ 8 8	Inside loop 9 8	3 Spins 4 8	Stall Turn 7 8	Two consecutive rolls 7 7	3 Spins 4 8	121 1st
David Hayward	Chipmunk	8 6 / 6 6 / 7 8	Inside loop 7 9	Horiz Roll 6 6	3 Spins 8 Only 1 attempt	2 Reversals 8 8	Stall Turn 4 3	100 2nd
Declan Cousins	Wot 4	6 6 / 6 6 / 7 7	Inside loop 6 7	½ Roll inverted 5 5	3 Spins 5 7	Stall Turn 4 5	Horiz Roll No score recorded	95 3rd
Robin Colbourne	Bush Master	8 8 / 6 6 / 6 7	Inside loop 4 5	3 Spins 5 4	Stall Turn 5 5	Immelmann 5 3	Flick Roll 7 6	90 4th
Ken Knox	Timber	8 6 /4 4 / 2 7	Inside loop 4 5	Barrel Roll 7 7	Stall Turn 4 5	Immelmann 3 3	2 Reversals 4 4	77 5th
Ken Smith	Wot 4	5 5/ 6 5 / 4 5	Inside Loop 6 6	½ Roll inverted 6 4	Stall Turn 7 5	Outside Loop 4 5	Horiz Roll No score recorded	73 6th
Simon Woodhead	Precision Aerobatics Ultimate AMR V2	5 5/ 6 5 / 4 5	Inside loop 6 6	Horiz Roll 8 5	Stall Turn 7	½ Roll inverted 4	3 Spins 7	72 7th

Unfortunately during round 2, Simon's Precision Aerobatics Biplane dismantled itself during a triple lutz. The upper wing parted company, followed by the rest of the plane entering a spiral dive. In Simon's own words, "The crash seemed to take an eternity and the sky was raining biplane for some considerable time."

Tim receiving 1st prize

David in 2nd place

It's also worth mentioning the Chipmunk that Dave Hayward was flying was given to him by Peter Doe, with the intention that Dave was going to finish building it, to let Peter hopefully fly it. Unfortunately Peter passed away just before the model's first flight; again another tribute to Peter seeing this model fly at this event.

The afternoon was a success and I think everybody enjoyed themselves. It certainly made one focus, and was a great way to watch others and improve your own flying.

Lastly I would like to thank David Draper and Duke Benson for stepping in, to carry out the judging.

The long-suffering judges!

Glider Competition Part 2 (E-Glider & Bungee) — Derek Honeysett

Saturday September 6th was the second date in our series of gliding competitions. Again there was a keen wind, this time ESE up to 20mph by the end of the afternoon. Fortunately the grass had been cut, which meant we could run both electric and bungee gliders at the same time.

Eleven CADMAC members turned up to compete, many bringing more than one model to enable them to compete in both classes. E gliders were to have a 20 second motor run (included in their time); for bungee gliders the time started on release from the line. The aim for both classes was to remain aloft for as long as possible with a ten minute max.

After a few test flights the competitions got underway. In the E glider class it looked as there was not going to be much lift, with initial times being quite low, around the 4 minute mark. That was until I launched my 2m Multiplex Solius. After a good climb I headed SE where I found I was not losing height but started climbing. I managed to hang on to the lift for as long as possible and returned a time of 7m 44s. What I hadn't realised was that Tim had spotted my technique, and had launched his Radian into the same area, and managed to returned a time of 10 minutes!

Round 2 saw George get a maximum ten minutes with his Easy Glider, and Adrian 8 minutes 59 seconds with a Highlite 2m. The rest of us didn't even manage 3 minutes. Over the next two rounds the times got progressively lower. We worked out that if you launched when there was a warm wind coming through there was lift, but if you launched into a cold wind there was nothing.

There was one scary moment when Colin let his ASW 28 get away from him and found himself looping very low over the sea; with help from Tim and the use of the motor, Colin thankfully managed to recover the model. The only other casualty was Ken who damaged his Multiplex Cularis.

The bungee gliders were run alongside the E gliders and care needed to be taken not to launch an E glider when the bungee was in use, to avoid getting tangled in the line.

Times generally were very low, even though a good height was achieved on the bungee. The best score in round one was Declan's 4m 57s with his Bird Of Time. Round 2 scores were even lower, with the best score again by Declan of 2m 31s.

A few of us braved round three. Bbearing in mind the wind was a steady 20mph, Declan scored an impressive 5m 17s, and subsequently spent several minutes telling us that victory in the bungee class was his - especially as I only scored 3m 51s with my Centi Phase! This left Adrian to fly with his 2.5m Algebra; watched very closely by Declan, Adrian launched to a good height and then headed out over the runway and found lift, retuning a time of 9m10s. Declan was extremely funny whilst watching Adrian's model almost reach a maximum, saying, "He always beats me on the last flight".

Bungee-launching gliders is not without risk as, wings can fold on launch or they can veer widely going up the line, as Bill found out to his cost when he lost his Bird Of Time. There were also other incidents; Dave managed to get his Elan into a spiral dive after release from the line, although this was recovered without damage but was not flown again. Robin had the canopy come off and the receiver come loose during a practice flight (again the model was recovered), and Phil damaged the nose of his Optima on landing (unfortunately on a practice flight putting this model out of the competition).

Electric Glider

Name	Model	Round 1	Round 2	Round 3	Round 4	Total /Position
Adrian Childs	Highlite	3.50 ✖	8.39	4.45	6.13	19.37 / 1st
Tim Kerss	Radian	10.00	2.46 ✖	4.37	3.43	18.20 / 2nd
George Gilchrist	Easy Glider	3.54	10.00	3.30	2.03 ✖	17.24 / 3rd
Derek Honeysett	Solius	7.44	2.56	5.38	2.18 ✖	16.18 / 4th
Colin Martin	ASW 28	3.29	2.34	4.12		10.15 / 5th
Phil Howard Smith	Solius	2.02	1.46 ✖	2.53	1.50	6.45 / 6th
Ken Knox	Cularis	1.38				1.38 / 7th

Bungee

Name	Model	Round 1	Round 2	Round 3	Total /Position
Adrian Childs	Algebra	3.51	2.23	9.10	15.24 / 1st
Declan Cousins	Bird Of Time	4.57	2.31	5.17	12.45 / 2nd
Derek Honeysett	Centi-Phase	4.33	1.57	3.51	10.20 / 3rd
Bill Pethers	Bird of Time	4.04			4.04 / 4th
Ken Knox	Amigo	2.30			2.30 / 5th
Phil Howard Smith	Genie	1.56			1.56 / 6th

Sidlesham September 2025 — Robin Colbourne

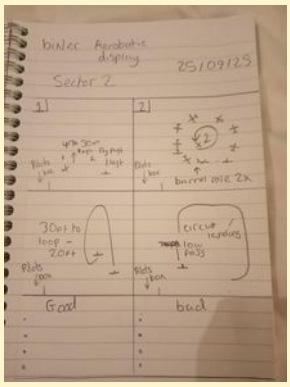
Thursday 25 September saw a return to the Sidlesham Memorial Ground to fly small, light models. Tim Kerss had been 'Keeper of the Cones' for the previous event, but couldn't make it so 'Muggins' here took on the role.

We set up on the floodlit pitch as had been done on the previous visit, however a visit from the groundsman made it apparent that this was hallowed turf, and he would really rather it wasn't used other than for football. We moved across to by the trees on the Western side of the Ground, which had the benefit of the sun being behind the trees.

David, Lee & Luke

The conditions were breezy, however we had five flyers; David Draper, Lee Seaman, Ian Carby, Junior Member, Luke (plus Mum/chauffeur, Sarah) me and two new member visitors, Aaron and one other whose name I must confess to forgetting.

David and Lee flew 450mm span TopRC models; a colourful red & yellow SIAI Marchetti SF260 and an olive green P-51D Mustang respectively; Ian had a Durafly Ugly Stick whilst Luke flew a Bixler 1.1. I took along my Turnigy Bonsai flying wing.



Luke's Planning

Ian and Luke coped admirably with the conditions, each had several flights, often up at the same time. Luke demonstrated the combined benefits of youth, practice and time on a simulator. In addition, he had planned out the manoeuvres that he intended to fly in a list and a series of diagrams and graded them how he felt they had turned out.

The breeze did have a habit of taking Lee's lightweight Mustang and the SF260 downwind. The Mustang disappeared over the trees, so we stopped flying for a bit and went as a search party to find it. We really had no idea how far, or in which direction the Mustang had gone, so we searched the trees and bushes around the ground, plus the large field to the North. Finding a green model against green foliage, seemed a bit of a long shot. In the event, it really hadn't gone far, landing undamaged in the meadow immediately behind us.

David's SF260, after several successful flights, managed to hit the trees immediately behind us, shedding its black knock-off propeller. We searched for the prop, but it will no doubt be found by one of our eagle-eyed junior members on a future visit.

Hunting the propeller

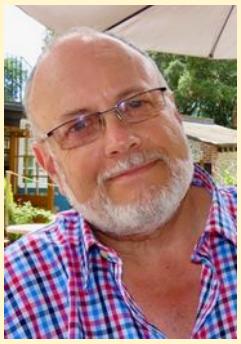
I managed to knock the front off my Bonsai, as I have done many times previously; it still flew without it, although I had to hold a fair bit of down in as the missing piece of foam must have buried nose-weight in it.

We all had a great time at this relatively new site to us, and I for one look forward to returning there.

New to Flying: Start here

Simon Woodhead

Beginners corner - Part 2: Bigger, better, faster and more expensive



Last time we learnt how to be Legal and safe - Not sorry;

Now its time to explore all the lovely kit you're going to need to get airborne, whilst remaining comfortable.

Mankind first learnt how to power fly in 1903 with very simple kit. Our remarkable rise to conquering the world of the birds is due in part to the rapid development in technology. It is this tech' that makes the model aviator's hobby, fun, interesting and wonderfully rewarding, so enjoy the tech' and the versatility it adds to our hobby lives.

When starting from scratch, do talk to your fellow aviators in the club and your local Model shop. They have years of personal experience to draw upon and will give all the guidance, and more, that you will need in choosing your kit.

Choosing a Transmitter (Radio or Tx) can feel daunting at first as there is much to choose from. If you're on a budget, a secondhand Radio via a club member or model shop can be a good place to start. Be wary of buying from secondhand on-line suppliers unless you know what your looking for in the specification. Ask a club member to help choose. Avoid the older 35 MHz radios as these are prone to interference and are not compatible with the latest 2.4 GHz Receivers (Rx). Avoid also 27 MHz radios as these are more prone to signal interference and are only suitable for ground based radio controlled (rc) vehicles. Only buy 2.4 GHz radios which have at least 8 Channels. The GHz term refers to the radio frequency of transmission, but what is a Channel?

A Channel is a communication band which is dedicated to a designated airplane function.

For example:

Engine speed requires a Channel
Elevator movement requires a Channel
Aileron movement requires a Channel
Rudder movement requires a Channel
Undercarriage retraction and deployment needs a Channel
If you use a Gyro to help stabilise flight this can use an additional two Channels.

So you can see we have used 7 Channels quite easily.

The cost of new Radios can vary tremendously, £100 to £1000 plus depending on the make and level of sophistication. Popular makes include Radiomaster, Futaba, Spektrum and FrSky to name a few. I started with Spektrum, but only because my Instructor was using the same equipment so I followed their recommendations.

At this moment, don't buy a Receiver (Rx) as this may be included with your first model.

Do take advice when buying your first plane. Go for a high-wing (wings on top of the fuselage not below) with good sized wheels, electric powered by 3S or 4S Lipo batteries.

Durable construction materials such as EPO or EPP (Expanded PolyOlefin or Expanded Propylene) are an excellent choice. There are a large number of Trainer models to choose from.

RTF – Ready To Fly - with everything you need to get airborne (Plane, Transmitter, Receiver, Charger) – all you may need are batteries.

BNF – Bind and Fly - are an excellent choice as the model contains a receiver and all you need to do is plug in a charged battery and bind (Pair) the receiver to your recently purchased transmitter. If you've not done this before, ask a club member to help you.

Many of the Trainer models have a Gyro included with the Receiver. The Gyro is usually configured to give you automatic 3 D stabilisation (Minimises the effect of wind turbulence) and a SAFE mode (Spektrum receivers), which when engaged will automatically level your model in flight, giving you a chance to recover and fly home like a Pro'. Your choice of model is considerable; take advice from Club members or your local model shop. A perfect example was referenced in Tim's article of the previous issue of Clear Dope; the E-flite Apprentice STS 1.5 ARTF basic Trainer version, which comes with a Spektrum transmitter linked to a receiver set up in the model with SAFE enabled. An excellent choice for a first model. The Transmitter is easily linked to another Spektrum Tx to create a buddy box trainer set up.

Whichever model you choose, do ask a club member to help you set up the model and Radio transmitter, and to check over the integrity of the model before helping you to achieve your first flight. More on this with my stories and experiences of 'How not to fly' in future articles.

In addition to the radio, model, receiver, batteries and battery charger you are going to need some basic tools. To quote Fraser's Clear Dope article last month. The modeller's Circle Of Life – Build – Fly – Crash and Repeat is an inevitable and enjoyable part of the hobby. Super glue (CA glue) or 5 minute Epoxy glue are two very common and essential items for your tool-box. Along with screwdrivers, pliers, knife, sand-paper and a plethora of items needed to keep your bird in the air. Add to your tool-box as needed as you step through the aero modeller's Circle Of Life.

Finally, keep yourself comfortable as you will be standing in a farmer's field for hours on end. In the winter, wellies or water-proof boots are a must, hat and coat. Gloves, although useful, may not be appropriate as considerable dexterity is required for model set up and flying. In the summer, sun-hat, sun lotion, sunglasses and bottles of water are essential.

So there you have it - the basic kit needed to get you airborne. As you gain experience over the years your interests will change; you are sure to want the bigger, better, faster more expensive kit, but that's part of the fun.

Next time we'll focus on your first airborne adventures, but rather than lessons in flying I will be sharing with you my personal stories of how NOT to fly. We learn from mistakes much quicker than from success, and when the mistakes are made by other people this is far more entertaining. Here is a taster.

My first ever attempt to fly was on Dartford Heath, in February, with a light dusting of snow on the ground. The sky was blue and the birds were singing – a special day , or it should have been. Can you work out how many mistakes I made?

I was flying solo with no help from club aviators.

I had built the model myself from a kit with zero knowledge of aeronautical flight understanding and I didn't read the instructions fully.

I didn't check that the movement of the ailerons were in the correct direction for controlled flight.

It wouldn't have mattered if I had tested the ailerons during pre-flight checks because I didn't understand which way they should move to fly left, right or even level.

Same for the rudder!

I did get the elevators moving in the right direction - I'm a little proud of that 😊 although I guess I did have only a 50% chance of getting it wrong!

…. And what of the maiden flight?

Take off went surprising smoothly all things considered, with a little help from a rabbit hole to straighten my path.
Height approx 6 metres.
Flight time about 5 seconds.
Distance travelled – somewhat shorter than the Wright brothers maiden flight.
Landing was inevitable under full power. Gravity and a complete lack of control took care of the rest. Carnage was total.

Luckily I had packed a bin-liner which came in useful for the sad remains.

So that's how not to set up for your first flight. On a positive note, there were no injuries - other than to my pride.

With a final philosophical thought, I do wonder that if I had been able to swap places with one of the Wright brothers in 1903 the airplane would probably never have been invented. That would surely have saved a bundle on the flying kit, and CADMAC club members would now be running around a farmer's field flapping arms up and down wondering how the birds do it!

Come to think of it - that reminds me of my first visit to Portshole. 😊

Foamie Pilatus PC-6 build

Fraser Dibden

Whenever I produce a new model that I have built, the first question that I am always asked is: "Is that scratch?" This is followed by audible sucking of teeth, sometimes followed by "Wow!" or some superlative. I am given the impression that that I am considered some kind of superhuman modeller with years of experience.

While this may be flattering, it is far from the truth; my foamie models are actually simple to make. Generally, I

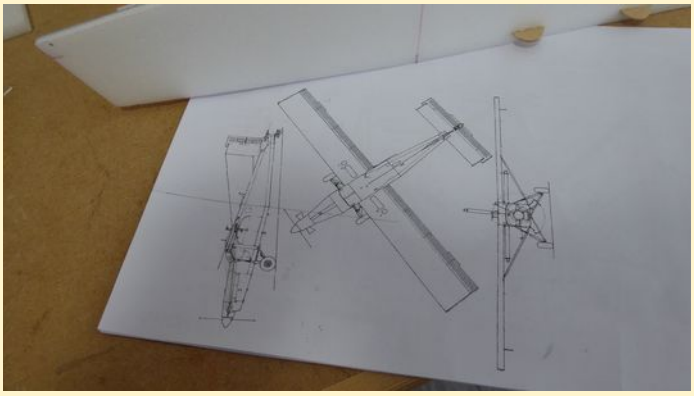
just slap some bits of foam together, carve them to shape, cover them with brown paper and then paint. That sounds awfully glib, but the reality is very little more than that, and can be attempted in the most basic of home workshops.

What I love about building from scratch is that I can choose any subject – often an aircraft (or perhaps a scale) for which no kit is produced in the world. I do not try to produce models that would win a competition; mine are more "Standoff scale". For me this gives a nice compromise, resulting in a good-looking model that does not take forever to build and can be in the air in a relatively short time.

By way of illustration, I detail here the build process for the Pilatus PC-6 'Turbo Porter' that I built earlier this year.

The Planning

This can often be a difficult issue for builders, but my technique could not be simpler. I start by deciding the size of the model: in this case 1400mm wingspan (I already had an appropriate motor, and the wing will fit in my car). I then source a 3-view drawing from the internet, and scale it on my printer so that it prints on paper with a wingspan 1/10th of my planned model – i.e. 14cm. This fits easily onto a page of A4, but more to the point, being exactly 1/10th of the size of my planned model I can take any measurement that I need and simply multiply it by 10 to apply to the model!



3-view on A4 paper at 1/10th scale

The Wings

I usually start with the wings, simply because the wing will need to be complete before one can cut the saddle in the fuselage. I generally cut my wings from polystyrene foam (EPS) using hot wire, but if you do not have hot-wire cutting equipment then the 'Flite Test' method using folded Foamboard is also very quick.

Wing cores with spar in place

I use www.airfoiltool.com for printing hot-wire templates. I glue these to formica sheet (I have tried cardboard picture mat, cardboard boxes, plywood, Foamboard lined with aluminium foil and other materials – I still find formica the best) which I sand carefully to shape the templates. I cut blocks of polystyrene (B&Q) that are slightly longer than the wing, so that I can trim the rough edges off when complete and still have the correctly sized wing. The result is (hopefully!) a fairly accurate polystyrene wing section.

Although not always necessary, I often insert a spar. In this case, the quick method I chose was to cut the wing in two lengthwise, insert balsa sheet, and glue the wing back together! Re-using the shucks (the offcuts from cutting the foam) helps to keep everything aligned while gluing.

Next, the wing has to be covered. Heat-shrink covering can be quite limiting as it does not easily accept paint, nor will it adhere directly to polystyrene. For these reasons, I have learnt to love the use of simple brown paper! I apply it in strips with thinned PVA glue (approx 1:1 ratio), almost like papier maché; it often looks horribly wrinkled when wet, but shrinks to a tight and very strong surface, giving immense strength to the foam. It's a messy job, but does not take long and the results are great.

Covered cores hanging to dry

Once dry, the wings were cleaned up and trimmed to size. To join them I inserted a small wooden joiner made from a couple of lollipop sticks, and glued everything together with a hot-melt glue gun – taking care, of course, to ensure accurate alignment and dihedral - finally adding a strip of brown paper to cover the join.

The last stage is to cut the control surfaces, and fit the servos. The beauty of paper-covered wings is that the covering can form the control hinge, just like the 'Flite Test' technique using Foamboard. All I had to do was cut V-shaped grooves from the bottom surface, cutting through the foam all the way up to (but not including) the upper paper surface. In this way the upper paper forms the hinge; very quick, and no fiddly hinge gluing process required! I used a new sharp blade to ensure the cuts were smooth. Also following the 'FT' technique I then applied a thin bead of hot-melt glue at the bottom of the groove, wiping away most of the glue while still wet, to give the hinge both strength and longevity.

Fitting the servos is simply a matter of cutting appropriate recesses. I have used a router on some models, but in this case I opted to use a small hot wire jig. I started by marking out the servo positions (by simply tracing around them) and the channels for the servo leads. Again using a sharp blade, I cut off the paper covering in the marked areas. Where it has been cut, the edge of the paper now forms a sort of 'template' against which to rest the hot wire, resulting in an easy process to cut the recesses and channels. The only variable is to make sure that the jig (or router) is set to the correct depth.

Hinge cuts and servo fitment

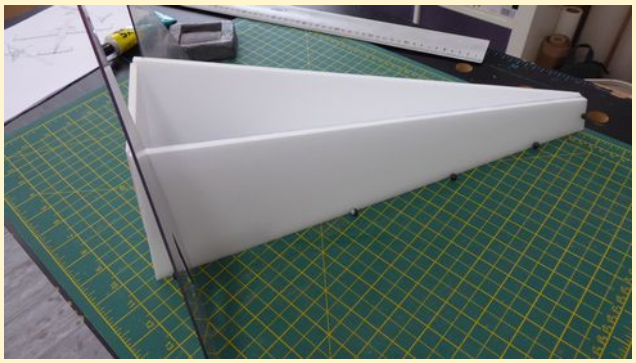
The servos were then glued into place with hot-melt glue, the

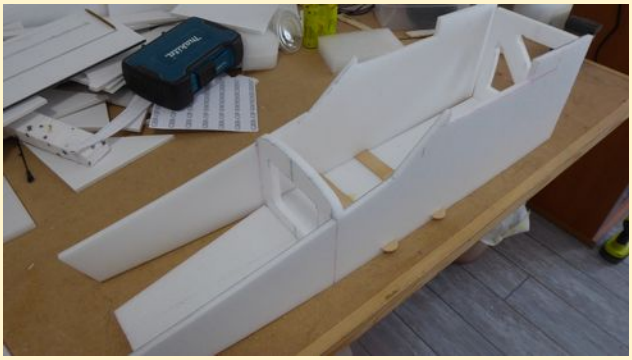
leads placed in their channels, and some small pieces/strips of brown paper applied (again with thinned PVA) to cover everything up.

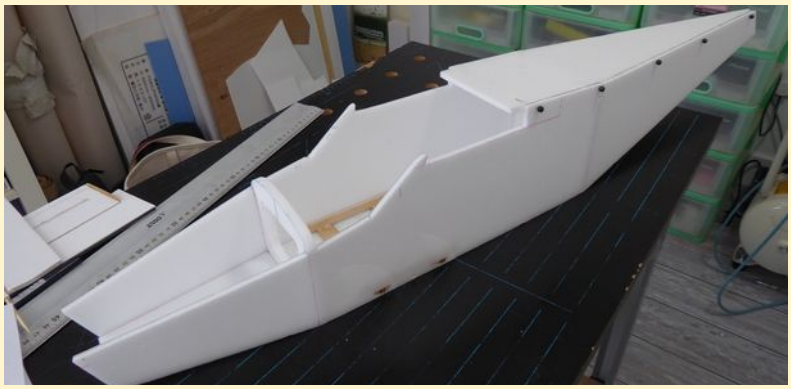
The Fuselage

For many of my model fuselages, I start with a Foamboard crutch (or core), with polystyrene sheets glued top and bottom which can be carved to shape. In the case of the PC-6, the fuselage is a simple box section, which lends itself to being easily made only from sheets of foam. Rather than using Foamboard (like FT), I chose to use 'Depron' (XPS foam) sheet: it's much easier to sand the corners to a nice rounded shape, and can be covered with brown paper to give a nice finish for painting. The Depron that I use is available as flooring insulation (Diall brand) from B&Q in 3/6/9mm thicknesses. I used hot-melt glue almost exclusively throughout.

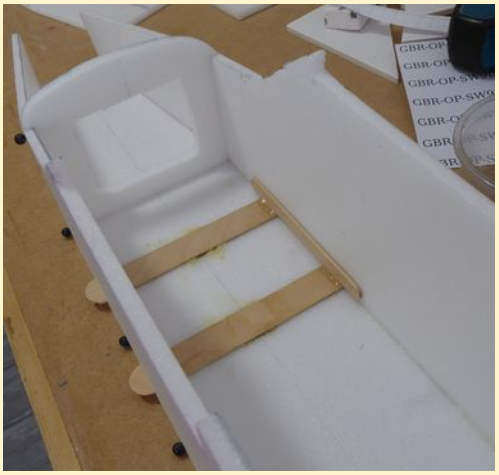
Because the Depron sheets were not big enough to do an entire fuselage side, I produced separate front and rear sections (mostly 6mm) which I subsequently joined; the following pictures illustrate the method.







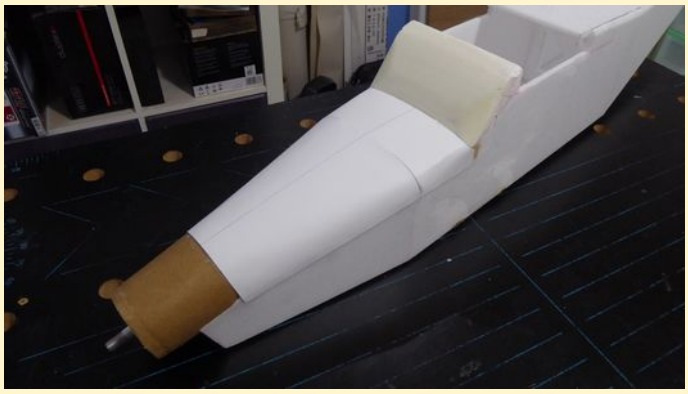
At this stage I also glued in place a framework made from lollipop sticks to support the landing gear.



The PC-6 landing gear forms a significant part of the character of this utilitarian aircraft: I wanted to reproduce it - fully sprung and working as the original - but with minimal effort. I could write a whole article on this alone, but I shall keep the story short. The four underneath struts are made from 2 pieces of piano wire bent to shape and bound/soldered together. These are thinner gauge wire than one might normally use, in order to allow some floppiness and let the spring struts do some work. The side (spring) struts are made from two pieces of aluminium tube, one sliding inside the other, with a couple of ball-point pen springs inside to allow movement like the real suspension. Believe me – there was a lot of trial and error involved!

Main gear & motor mount

For the motor mount, I rolled some Depron sheet into a tapered (conical) cylinder and covered it with brown paper for strength. Into this I glued a circular firewall cut from plywood, bolted the motor in place, and glued the whole assembly onto the nose of the aircraft. As well as ensuring the correct right/down thrust angles, I also added several gussets of Depron to strengthen the mounting. Next the front windscreen was carved from PIR foam (the stuff in the middle of 'Recticel' insulation boards) and glued in place. The forward fuse cover was fabricated from cardstock: I made several attempts with a piece of paper until I was happy with the shape and fit, then copied it onto the cardstock and glued it into place.



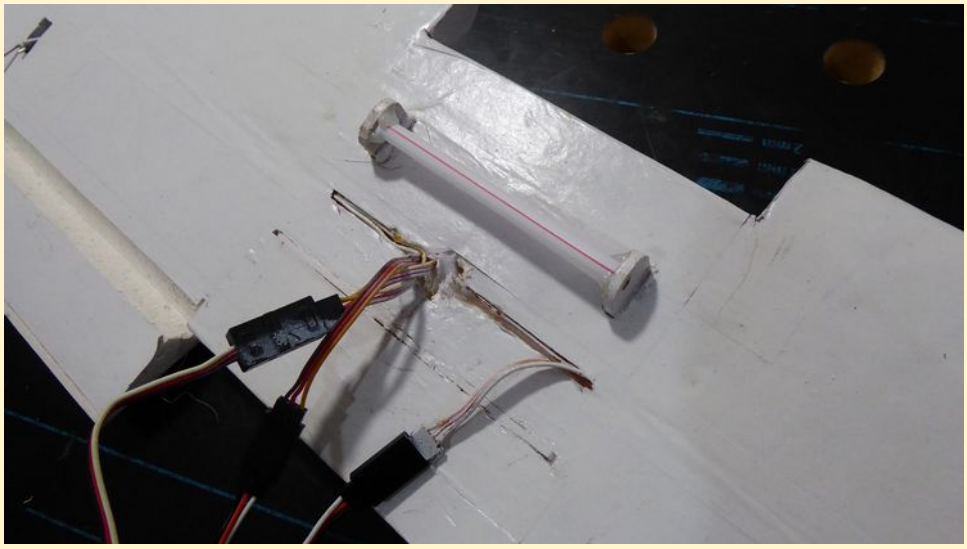
Windscreen and forward fuselage cover

Once complete, everything was sanded to give nice rounded edges, and a few minor scale details (e.g. the starboard door) were added before covering the fuselage in brown paper using the same technique as the wings.

Completed fuselage covered with brown paper

Wing Mounting

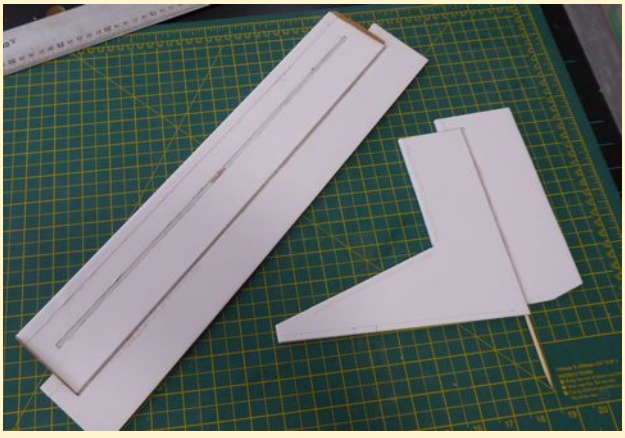
Rather than using traditional screws or rubber bands, I opted to use my own method comprising tabs glued into the wing, pinned through the fuselage sides with a BBQ skewer. The tabs are inserted into the wing, just far enough apart to fit within the fuselage, and glued in place ensuring that they have some attachment directly to the spar; the fuselage 'saddle' is reinforced with lollipop sticks. With the wing in place, I use a long drill bit to make a hole from one side of the aircraft to the other through both tabs, and through which I insert a bamboo BBQ skewer to pin the wing in place. Lastly I add a bit of drinking straw simply to help guide the skewer into place when I am at the field. The result is amply strong, is almost invisible, and takes only couple of seconds to mount/ remove the wing.



Wing centre showing tabs with guide straw

Tail Feathers

With the wing in place, it is now possible to align and mount the tail feathers. For lightness and simplicity, I made these from Foamboard exactly in the manner put forward by 'Flite Test'. They are each strengthened with a BBQ skewer, and glued in place with hot-melt glue paying careful attention to their alignment with respect to the wing.



Whilst we all know that it is critical to ensure that the tailplane is level with the wing and that the fin is at 90°, it is just as important to set the correct decalage angle. In flight, the fuselage attitude will approximately follow the tailplane, but the wing is most commonly set at a slightly positive angle of incidence to the tailplane, so that there is lift in level flight: this is called the decalage angle. For a high-wing aircraft such as the PC6, I chose to set the tailplane parallel (horizontal) to the fuselage, with the wing set at 1-2° positive incidence.

Painting and Decorating

The first issue with painting a model is deciding on a colour scheme. Since I am painting, my options are far greater than if I had been using heat-shrink covering. Going scale, choosing the colour scheme means a bit of searching the internet until one finds the scheme you want. (In fact, that's sometimes how my whole model concept begins).

For the PC-6, I have always liked those operated by 'Air Glaciers' in the Eighties, registered in Switzerland. The one I chose was 'HB-FCF': it went through several different liveries during it's life, but my favourite is shown in this photo. It has the added benefit that most of paint lines are straight, making the masking for painting that much simpler.

The real HB-FCF operated by Air Glaciers

Whilst one can paint an Airfix model by brush, there is really no substitute to spray-painting larger models to achieve a nice finish. I am fortunate enough to possess a small shop compressor, which powers both my air-brushes (for smaller areas and better finishes) and an automotive spray gun (for larger areas). The subject of spray-painting could easily cover yet another article (perhaps one day …)

In summary: I always use acrylic (water-based) products: non-toxic and easy to clean. I start by using an automotive gun to lay down a coat or two of acrylic primer, then I spray the base colour – in this case white – also using the automotive gun, and also using acrylic paint. I then masked the grey area and sprayed it with an airbrush. This was followed by the red areas, and finally the black areas.

The matt finish of acrylic paints

Acrylic paints, especially craft or artist acrylics, mostly dry with a matt finish. To make the model more realistic, one must therefore apply a coating of clear gloss varnish, which also has the benefit of adding a distinct measure of toughness and protection to a foamie. However, before doing so, the detailing (windows, decals, lettering) must be applied so that the varnish also provides protection over the top of these. For those of you that subscribe to

the myth that all these layers of paint and varnish add terrible amounts of weight, you need to hold this model in your own hands: flying weight (including 3S 2500mAh battery) is a mere 1100g!

I find producing bespoke clear plastic canopies and windows to be difficult, complicated, and time-consuming. Generally I choose to either paint windows or make 'photo-realistic' decals. On the PC6, for the front windscreen and pilot side windows, I found suitable pictures on the internet which I resized, printed, and glued in place; for 'standoff scale' they are more than adequate. The cabin windows were spray painted. For the registration and other lettering, I used vinyl-cut lettering produced by www.bannerbuzz.co.uk, and simulated the corrugated panels with a felt-tip pen.

Once the detailing was completed, I used the automotive gun to spray three coats of acrylic gloss varnish (basically furniture/floor varnish) to finish off the model. Whilst it may not win a static competition, the result, I hope you will agree, is nevertheless quite a 'looker' that makes me very proud!

BOLT X Lipo Batteries

Lee Seaman

LIPO Batteries. Cheap as chips and more than twice the rating! Nah really?

Yes, Hobbyking again are offering another good value product at almost half the price of comparable popular main brands. Are they any good?

Do check out the HV Turnigy BOLT X series of batteries. The initial blurb on the website doesn't tell you much but the performance I've found is very good. A number of YouTube tests have glowing reports and although we know we look at recommendations with some scepticism, I've been testing a pair of these high voltage 2400mah 4S's and they (though early days of use) are outperforming all my others comfortably. For the same size as a popular 2200mah 35c battery it is 15.2Volt not 14.8volt. The stated 80C rating (which we often also take with a pinch of salt) where we look for high amperage performance - not just short bursts of power - they do definitely deliver, and not for short bursts only. The C rating is definitely much better.

From the little I can glean, the chemistry internally is new, along with the siting of internal connections. They are said to have a higher density, and when tested alongside fully charged comparable batteries in a 50mm EDF Hawk they had considerably more power than I expected. The acceleration was quicker each flight than the others (also new), and the high end I found were very close to outperforming the model! Flight times are good and the batteries remained cool, which along with low internal resistance was just what I'd hoped for.

Like for like they are definitely smaller (check out the dimensions) and in some instances they are lighter too, which is one of the reasons I felt I had to give them a good go.

When setting up the charger, the cells are 4.35v not 4.2v, though you can charge them at the standard charge rate if you prefer. We place high demands on some of our quicker models, especially the EDF's and these look to deliver as described. That's new.

I'm not sure yet whether they will be breaking records but they definitely do not break the bank, so I may well buy more.

Tool Tip: DIY Router

Fraser Dibden

Cutting rebates, channels, and recesses in model aircraft can be challenging without the right equipment. On a foamie model, one might use a small hot-wire cutter to cut (for example) servo recesses and servo lead channels. If you do not possess a hot-wire cutting setup, then a router makes a good alternative. It can also be used for wood and other materials.

A dedicated router from the hardware store can be expensive and is usually too big for our modelling purposes. However, almost all of us own a modeller's drill (aka 'Dremel'). If you own an actual 'Dremel'-brand tool, then for a small mortgage you can buy a router attachment. In my case I own a generic drill bought from Amazon, and decided to make my own router attachment.

Converting a drill into a router simply requires fabricating a 'depth stop' to regulate the depth of drilling. Mine is made from two pieces of plywood, joined by a piece of hardwood as shown in the following photos:

The three pieces are are glued with epoxy and screwed together for strength. The smaller plywood piece is cut to fit the drill, where it is held in place under the removable plastic 'collar' at the business end of the drill.

Be aware that using a router makes a mess. Shavings and dust will go everywhere, and if cutting foam, the dust acquires a static charge and sticks to everything in sight! A good option is to have a helper hold the nozzle of a vacuum cleaner close to the tool while cutting.

Gearing cheap servos for power

Jeff Cosford

When setting up a model, we all know that it is best to adjust linkages mechanically using horn lengths, rather than relying on reduced throws (travel) at the transmitter. Most of the time, it doesn't make a huge difference — until you push a model hard.

Last month, I picked up a Pilot Extra, 60" with 6-cell power, from Facebook Marketplace for only £220. A bargain for a quality airframe, though the listing was sketchy. When I collected it from Kettering (on the way home from the Funfly competition), I wasn't surprised to find cheap servos fitted. Pilot recommends a minimum of 7kg torque.

I installed my receiver and left the servo linkages untouched, compensating by reducing throws in the transmitter. On its test flight at Portshole, the weakness showed quickly: the ailerons slowed noticeably as airspeed built, with the servos struggling to hold the big surfaces. The Extra felt sluggish — the opposite of the crisp, spirited response the design is known for.

Despite this, the model exceeded expectations overall, so I decided to fly it at the Peter Doe Aerobatics event. With only a few days to prepare, there was no time to swap servos. Instead, I set about squeezing maximum performance from the ones already fitted.

Servo travel was increased to 120% on all four channels.

Pushrods were moved in by two or three holes at the servo arms, to get the extreme movement this model demands. (The control surface horns were glued at the factory with only a single hole, so adjustment there was not an option).

The goal was to maximise transmitter travel — 140% may even be achievable. Initially, my ailerons were as low as 65%, with elevator and rudder around 80%.

This approach increases both efficiency and torque. Remember, servo torque is specified with a 10mm horn. Using a 20–25mm horn effectively halves the available torque. After making these changes, the controls were noticeably crisper, particularly the ailerons.

Since the competition, I've fitted four new 7kg MacGregor servos (£40 each). The difference in both speed and power is remarkable — the Extra now flies as it should. The photo shows the old and new servos, along with the pushrod moved in two holes.

Skunk Works Part 1

Tim Kerss

The Skunk Works are still going strong … in Bognor Regis!

I guess that most of you know, or have met, someone that "Bores for Britain". You know, the person that drones on about a subject close to their heart, without any consideration for the feelings or views of the poor recipient who, in turn, can only nod sagely and suppress their yawns. In the RAF characters such as this were nick-named WIWOLs, because just about everything that they had to say began with the phrase "When I Was On Lightnings ….". However, when I joined British Airways I was amused to learn that the description had carried over into the civilian world as WIWOTs, or "When I Was On Tridents …" (yawn!).

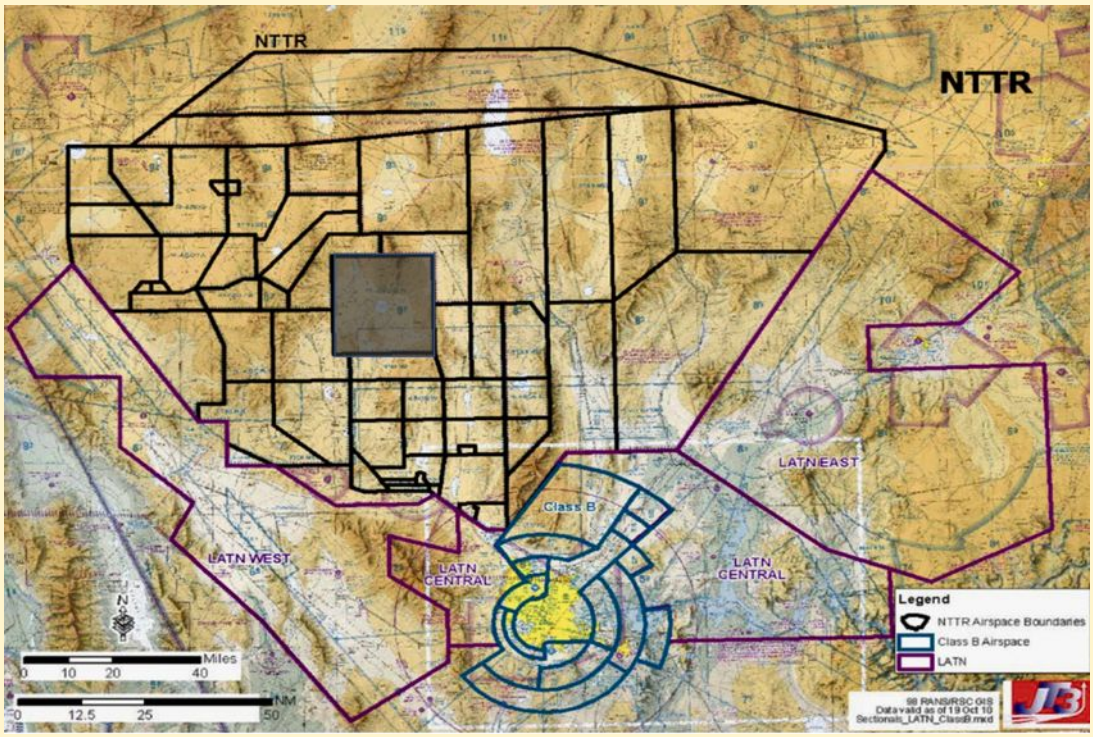
It is with this in mind that I have chosen to start this article as a WIWOJ. So, a thousand apologies dear reader, but "When I Was On Jaguars" …. I was fortunate enough to take part in more than one "Exercise Red Flag", flying out of Nellis Air Force Base, near Las Vegas, in the Nevada Desert.

By way of explanation, the Exercise had its roots in the era of the Vietnam War, when the Americans found themselves losing significant numbers of aircraft flown by rookie pilots who were thrown, unprepared, into a hostile environment, with threats from ground-based weapons and enemy aircraft. The concept of Exercise Red Flag was therefore to give pilots the chance to fly 10 missions in a simulated threat-filled environment to practice plans and tactics before going into real operations. The results were impressive, resulting in a significant reduction in aircraft losses in Vietnam.

After the Vietnam War the exercise was maintained, and NATO air forces were invited to participate. For us RAF Jaguar "mud-movers" (low flying bombers) it gave us the chance to practice flying in large coordinated groups of different aircraft (packages), delivering real and practice weapons. We had to fight our way through a variety of ground-based threats (equipped with real Soviet radars), and American Aggressor Squadron aircraft, that employed Soviet interception tactics. Initially these were F5 fighters, but were later replaced by F16s, sporting a suitable paint scheme.

The flying took place inside the "Nellis Ranges", a massive area of the Nevada Desert in which we were cleared to fly down to … ahem …. 100 feet above the ground.

The flying area itself is shown on this pilots' flying map below:



Nellis airfield is at the bottom (within the yellow area), and the ranges are to the north, with the majority of ground targets located towards the left hand side of the map. The flow of a package was therefore usually an anti-clockwise arc entering from the East and exiting along a reverse route, or out to the West.

However, the feature that I really want to draw attention to is the shaded square that sits right in the middle of the range areas, as it is this that provides a very tenuous link between my WIWOJ story and RC model aircraft!

This shaded square in the middle of the map was a designated hard-and-fast “no fly zone”, and was nicknamed “the Box”. In a mandatory briefing before each exercise, pilots were informed that anyone that flew into the boxed area, for whatever reason, would be met on landing by the “Men in Black”, subjected to a one-way interview, presented with a ticket on the next flight home, and escorted off the base by an armed guard!

As an aside, on one mission a fellow Jaguar pilot suffered a serious engine malfunction over the target area and (very wisely) elected to divert to a relief airfield near Tonopah, situated within the Nellis Range area at the top left hand corner of the map. On landing, he was indeed met by some Men in Black, who told him that he “hadn’t seen what he was seeing”, and if he ever discussed it ….. well, they knew where he lived! Needless to say, Dave never did discuss what he saw, although I wouldn’t be surprised if it was something to do with the USAF’s “Constant Peg” programme which, at that time, involved the flying and evaluation of soviet fighter aircraft “acquired” from around the World.

The programme is has now been declassified, and there are some very interesting videos about it on YouTube; just Google “constant peg”, and you’ll see what I mean.

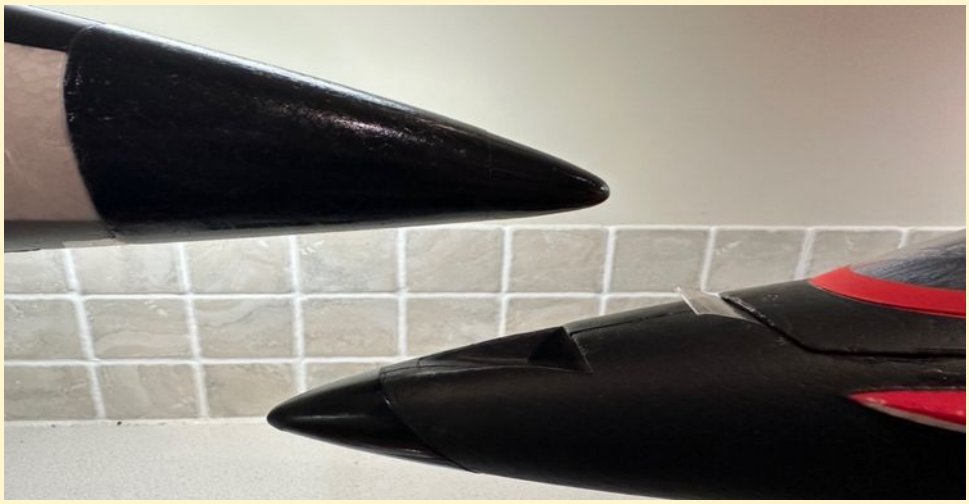
Anyway, back to “the Box”. This was clearly an extremely sensitive area and rumours abounded about strange aircraft, lights and even UFOs being seen in the vicinity. Interestingly, it also coincides with the infamous Area 51. On our maps at the time the box was centred on a dried-up lakebed, however it has since been revealed that, yes, there is a runway there which forms part of a military complex at Groom Lake, the official name of which is Homey Airport. Indeed, other videos to be found on YouTube also feature interviews with people that (claim to have) worked there, and more information can be found on Wikipedia.

Not surprisingly, the highly secret facility was used to develop and test some of the “black projects”; aircraft that came out of the infamous skunk works, and took the world by surprise - the SR71 and F117A stealth fighter being two that spring to mind.

So, you might reasonably ask “where is all this drivel going, and how does it relate to RC aircraft?”.

The answer is that over the past month or so, my man-cave has been turned into a ‘skunk works’, with the construction of two projects that I’m confident will attract comments along the lines of “what the heck is that?” (or ruder) when they appear for the first time at Thorney. I’ve decided to keep them under wraps for maximum effect - hence the analogy. Also, being a WIWOJ, I naturally assumed that you’d want to hear a Jaguar story or two, even if you didn’t!

Anyway, whilst there may not be a Notam'd avoidance box around Bognor Regis, the local skunk works is in full production……



Standby for Part 2 in the next edition of Clear Dope, which hopefully will include an account of strange things in the air …. or buried nose-first in the ground, if testing is unsuccessful!

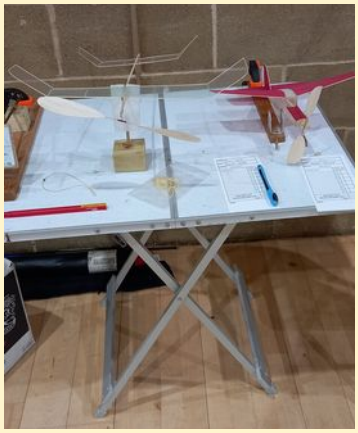
All I will need is someone mad enough to test-fly them for the first time: Derek, are you reading this?

BMFA Free Flight Indoor Duration Nationals — Robert Horton

Around mid August I received an email reminder about the closing date for entries for the BMFA 2025 Indoor Duration Nationals which were due to be held in September at the Daventry Leisure Centre near Northampton. My F1L was quite old but was flyable and I had been toying with the idea of entering for some time, so I decided to bite the bullet and give it a go, really just for the opportunity to pick up some tips from the experts and fly in a largish hall. So I packed the car the night before and set off early on 20th for the 2 hour trip round the M25 and M1 to arrive around 0900h.

The duration events for the lightweight models (F1L, F1D) were flown using half motors to limit flight times to a reasonable length whilst allowing the model to be trimmed for full motor flights for larger halls. This was new for me and I had look up how to build and use a half motor. Basically half of the available length for a rubber motor on the fuselage is replaced by a stick that weighs the same as half the weight of a full rubber motor.

First flights with the half motor were a bit baffling as the model kept nose diving onto the floor. Initially I was thinking there was something wrong with the CoG with the new set up but then I realised I had been trimming the tailplane the wrong way! Once trim restored correctly it began climbing nicely. There were a few dodgy moments where it bounced off the roof girders but luckily no hangups and the 9m carp pole was not needed. By the end of the day it had managed two flights just over 5 minutes each.



At the end of the day, model still intact after 6 successful flights and without getting hung up in the roof girders!

Spot the planes. There are three models in this video snapshot. Mine is just just above the “everyone ACTIVE sign” and a larger and lighter F1D (not mine), using a variable pitch prop can be seen to the right near the top of the green curtain. Can you spot the third one?

CD Quiz October 2025

1. Aluminium alloys are used in full-size and model aircraft components due to their high strength to weight ratio. Aluminium alloys have roughly the same density as:

   A. Carbon fibre reinforced plastic B. Birch plywood C. Oak D. Granite

2. True or False?
   Each inch of pitch of a propeller turning at 10,000rpm is worth approximately 10mph of movement though the air if blade aerofoil gains are ignored. i.e. 6" pitch at 10000rpm = 60mph.

3. EPO, EPS and EPP are all materials commonly used on our 'foamie' models over the years.
   In these examples EP stands for:

   A. Electric Powered B. Elapor C. Expanded Poly D. Economy Plastic

4. In aviation, 'Phillips Entry' refers to:

   A. Druine Turbulent G-APNZ, entered by the late Duke of Edinburgh in the 1960 King's Cup Air Race.
   B. On an aerofoil such as the Clark Y, the curve on the underside up towards the leading edge, to reduce drag at lower angles of attack.
   C. The X-shaped hole in the top of a crosshead screw.
   D. The socket where a microphone lead plugs in the face of a Dutch-made airborne radio transceiver.

5. Storage charge voltage per cell on a Lithium Polymer battery is:

   A. 0.1v B. 3.7v C. 3.8v D. 4.25v

6. What would the nominal no-load maximum RPM be for a 1400KV brushless motor running on a 3S Lithium Polymer battery?

   A. 4200 B. 14,540 C. 15,540 D. 17,640

7. Why might you choose to run Lithium Polymer battery packs in parallel?

   A. More thrust B. To prevent the speed controller overheating
   C. Longer duration D. Lighter wiring

8. A brushless motor is described as a BR2212. To what are the numbers most likely to refer:

   A. 22mm diameter x 12mm long stator B. 22 gram motor with a 12mm long shaft
   C. 22 gauge wire stator with 12 turns per coil D. 22 magnets on a 12mm radius

9. Aileron differential is used to:

   A. Reduce adverse yaw in turns B. Improve roll performance when inverted
   C. Prevent aileron servos being overloaded D. Make the model less sensitive.

10. A low wing model tends to dive as power is applied. What corrective measure could be used prevent this?

A. Droop the ailerons
B. Up thrust on the motor
C. Down thrust on the motor
D. A lower pitch prop

11. Washout is used to improve an aircraft's stalling characteristics. How is this achieved?

A. The wingtips are at a higher angle of incidence to generate more lift at low speeds
B. The left wing tip is at a higher incidence to generate lift to counteract the torque from the motor
C. The wingtips are at a reduced incidence so they are still flying after the centre section of the wing has stalled, so the aircraft stalls without dropping a wing.
D. The tailplane is at an exaggerated negative angle of incidence, so the wing can't stall.

12. On what type of aircraft are you most likely to find reflex?

A. A canard
B. A biplane
C. Duran Duran's world tour jet
D. A flying wing

13. After a few heavy landings, a tricycle undercarriage training model became hard to keep straight on the ground and took longer to get to a point that it will rotate into a climb. Turning the wire main undercarriage legs around improved matters. Why?

A. The legs have bent, causing toe out and pushing the main wheels back. Reversing them gives toe in, keeping the model straight. The rearward bend is now forward, putting the mainwheels closer to the centre of gravity, reduces the required tailplane downforce needed to rotate on takeoff.

B. The time taken to turn the legs around has given the trainee pilot a breather, so he is better able to focus by the time of the next flight.

C. The battery and/or fuel tank has moved forward as a result of the heavy landings, altering the centre of gravity and in turn the ground handling.

14. Induction / Compression / Ignition / Exhaust is a process which applies to which engines?

A. Four Stroke
B. Two Stroke & Four Stroke
C. Four Stroke and Gas Turbine
D. Two Stroke, Four Stroke and Gas Turbine

15. On models with retractable undercarriage, it is common to use a separate battery for the retract servo(s). Why?

A. Retract servos operate on a different voltage to the receiver and other servos
B. They need a larger capacity battery
C. To avoid the receiver battery being flattened by a stalled retract servo
D. Because the retract battery is mounted in the wing near the retract servo(s)

16. Your high-powered brushless electric model, which has downthrust and sidethrust built in, noses over, breaking the prop. Someone offers you a prop of the right diameter and pitch, but it is of the opposite rotation to yours. Which of these statements is correct?

A. It can't be used, as the airflow will push the model backwards
B. It can be used. Swap a couple of the motor leads, then everything else will be as before.

C. It can be used, swap a couple of the motor leads over and be aware that the side thrust and down thrust will now be in the wrong directions.
D. It can be used, swap a couple of the motor leads over, note side thrust will be in the wrong direction and the model will swing the opposite way on takeoff.

17. Your model on 2.4GHz appears to stop responding to commands as it is flying away from you. Which of these is most likely to regain control?

A. Turn your transmitter off and on again.
B. Get a fellow modeller to switch their transmitter on and see if they can get control of it
C. Put both sticks to full movement for all controls
D. Turn the transmitter so its aerial is at right angles to the model.

18. If you set up coupled aileron and rudder (CAR) on your transmitter in line with normal conventions, which of these is true?

A. Aileron stick input will move the rudder in the same direction. Rudder stick input will not move the rudder.

B. Aileron stick input will move the rudder in the same direction. Rudder stick input will move only the rudder.

C. Aileron input will move the rudder in the opposite direction. Rudder input will move only the rudder, but in the right direction.

D. Moving either the rudder or the aileron stick will move both the aileron & rudder in the same direction.

19. You are up on The Trundle and your aerobatic slope soarer is struggling to penetrate in the strong breeze. A fellow flyer offers you some lead to use as ballast as he says this will make it fly faster. Where should you put the lead?

A. In the nose
B. On the centre of gravity
C. Behind the centre of gravity
D. Halfway along the wings to reduce wing bending.

20. You are at Portshole and the grass is due for a cut. Your model is barely at flying speed by the end of the patch although the prop is still well clear of the grass. Which of these is most likely to help?

A. A smaller, finer pitch prop
B. A larger, finer pitch prop
C. A smaller, coarser pitch prop
D. A larger, coarser pitch prop

August 2025 'Clear Dope' - The Wall - Quiz Answers

The objective of the quiz was to create four sets of four words that have a model or full-size aircraft connection. Note, if you had 'Goose' as a Grumman aircraft design and 'Cougar' as a Top Gun callsign, that is also acceptable.

Group 1 – Air-launched missiles			
			
AGM-65 Maverick	AGM-114 Hellfire	AIM-9 Sidewinder	AIR-2 Genie
Group 2 – Top Gun Callsigns			
			
'Jester'	'Goose'	'Wolfman'	'Slider'
Group 3 – Grumman Aircraft Designs			
			
Cougar	Mallard	Hawkeye	Panther
Group 4 – USAF Aircraft Nicknames			
			
F-16 'Viper'	B-1B 'Bone'	F-111 'Aardvark'	A-10 'Warthog'

Arun & Chichester (Air) Enthusiasts Society

AirACES

www.airaces.org.uk

Patrons – Sqn Ldr Richard (Dick) Kharegat RAF (Ret'd) – ex Vulcan, Victor, B52 Pilot
Sqn Ldr Rod Dean RAF (Ret'd) – ex Hawker Hunter Pilot and Display Pilot

PRESS RELEASE

Monday 27th October 2025 - 1845 for 1930 hrs
Boxgrove Village Hall, PO18 0EE

"The Duxford B17G & the 8th May 1944 mission to Berlin"

Presented by Mr Jeremy Gardner
(A volunteer at IWM, Duxford)

The US Eighth Army Air Force first visited Berlin in strength on 6th March 1944, although the 95th Bomb Group had famously penetrated the air space above Berlin on 4th March, despite the weather recall that went out. RAF Bomber Command had already had a crack at the "Big City" and now it was the American's turn to find out just what a tough target it was. Arthur Harris despatched 19 major nighttime raids to the Reich capital between August 1943 and March 1944. It cost his Command over six hundred heavy bombers and their crews. Would the Eighth's heavies fare better in daylight? The first mission cost Doolittle 69 of his heavy bombers, so on the face of it nothing had changed. On the 8th of May 1944, another mission to Berlin was planned, and amongst the attacking aircraft was B17G 238133 "Reluctant Dragon" of the 96th Bomb Group.

AirACES is an aviation talk society, providing its members with regular talks, given by experts in many different fields related to the world of aviation.
VENUE – Boxgrove Village Hall, The Street, Boxgrove, Chichester, PO18 0EE
6.45 pm for 7.30 start. Members £5, Non-members £10 and under 16s FREE.
Doors open at 6.45 no pre-booking, no reserved seating

For further information about AirACES, please see www.airaces.org.uk
Email: airacesuk@gmail.com or call Air Aces on 07423 670703

2025 Diary Dates

For the most up-to-date details, please check the CADMAC website.

October	Thursday 9th	Fishbourne	Quiz Night
October	Thursday 16th	Trundle	Evening fly-in
October	Saturday 18th	Thorney	Gliding Competition
November	Sunday 9th	Thorney	Remembrance Gliding Competition
November	*Wednesday 12th*	Fishbourne	Talk by Chris Foss
December	Thursday 11th	Fishbourne	AGM

Coming Up In 2026

January	Thursday 8th	Fishbourne	Talk by Matt Takhar from Matt Takhar RC
February	Thursday 12th	Fishbourne	Talk by Rod Dean - Flying Vintage Piston Aircraft
March	Thursday 12th	Fishbourne	Talk by Jon of Microaces
October	Thursday 8th	Fishbourne	David Draper - 80 years of Aeromodelling

Safety Corner

Landing:

NEVER assume that the landing area is clear even if you have called landing. In emergency situations call for help from your fellow flyers and always be prepared to land in a safe place off the landing area if necessary.

Retrieving:

Pilots retrieving models from the active runway must call out their intentions 'loud and clear' and GET CONFIRMATION from any pilots still flying that it is safe for them to do so. In ALL cases, the safety of people is paramount.

Your CADMAC Committee

Chairman: Derek Honeysett	***chairman@cadmac.co.uk***
Hon Secretary & Treasurer: Tim Kerss	***secretary@cadmac.co.uk***
Thorney Rep/Safety Officer: Derek Honeysett	***thorneyrep@cadmac.co.uk***
Deputy Thorney Rep/CD: Fraser Dibden	***thorneyrep-2@cadmac.co.uk***
Portshole Rep/Safety Officer: Ken Smith	***portholerep@cadmac.co.uk***
Deputy Portshole Rep: George Gilchrist	***portholerep-2@cadmac.co.uk***
Slope Rep/Safety officer Trundle: Steve Newman	***sloperep@cadmac.co.uk***
Webmaster: David Hayward	***webmaster@cadmac.co.uk***
Junior/Welfare Rep: Ray Shivjee	***juniorrep@cadmac.co.uk***
BMFA Rep: Ken Knox	***bmfa@cadmac.co.uk***
CD Co-Editor: Robin Colbourne	***editor@cadmac.co.uk***
Membership Secretary: Jeff Cosford	***membership@cadmac.co.uk***
Competitions Secretary: Ray Shivjee	***compsec@cadmac.co.uk***
Social Rep: Ian Carby	***socialrep@cadmac.co.uk***