Meadow Flyer
Newsletter of The Oxford M.F.C.

Summer 2024

Oxford MFC in Action – left to right are Ian East (with DB Barnstormer), Paul Thomas, Alan Smith and Alan Trinder. However, someone appears to have abandoned what appears to be a perfectly serviceable touring velocipede - with luggage - in the middle of the pits area. Perhaps the Ashmoleum would be interested in taking it? [Photo: Simon Burch]

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Editorial

Welcome to another bumper edition of the Oxford MFC – Simon has written a very comprehensive article on slope soaring and I felt that it would be useful to include it, although we do have quite a lot going on in this issue what with electric RTP at Begbroke and the Spring duration competitions.

In other news, I'm now regretting not building more airframes over the extensive winter period when I had the time to do it – the last few weeks at home have been spent addressing the domestic equivalent of what Software Engineers call "Technical Debt", which is an accumulation of months (or years, in this case) of decisions made in a way that favour expediency over doing the job properly (e.g. delayed house painting, dodgy lights, bodged doors that don't latch, accumulated junk, etc.). I've therefore had to radically scale back what was – in hindsight – an over-ambitious plan for what to build this year. However, I thought I'd try a FW 190 from the Keil Kraft Flying Scale series, because success with this model eluded me back in the 1970s (the silly plastic thrust button in the silly plastic cowl, which was actually half a 2" wheel were probably to blame. The silly plastic propeller didn't help). Bits of the plan are a shambles (e.g. the wings) and will have to be re-drawn, but parts of it are OK. And it won't be built from Eddie Keil's "special" (i.e. cheap Solarbo hand-me-down) 16 lb/cu ft 1/16" balsa, so it might have a fighting chance.

I'd like to thank David Lovegrove, Bob Lee, Chris Brainwood, Alan Trinder, Simon Burch, Dave Monk, Ian Melville and Bill Dennis for providing services and content for the newsletter.

Chairman's Chat – Bob Lee

There has been quite a lot going on in the last couple of months, the first of which is the resumption of summer (?) meetings with flying at the Begbroke playing field. The April meeting wasn't blessed with the best of weather but the day was saved by Chris Brainwood and Charlie Newman providing an indoor, electric RTP demo using the club's kit. Chris flew a simple (and low cost) profile model from RTP Hut while Charlie flew a wide range of models up to approx. 30 inch wingspan which even included a twin. I had no idea that such large models could be flown on the short lines that we have to use due to space limitations. Chris brought the kit to the May meeting as well and has now built a second profile model. Lots of club members have had a go on this kit, including Pam who had a couple of flights. The May meeting also had very good weather for outdoor flying, there were several radio models in the air at the same time and I managed to fly my electric powered RC variation on the Cloud Tramp which flew well in the light winds.

The Spring duration competition went well *[Report on page 34 – Ed]* and showed that the idea of a reserve date in case of unsuitable weather can work well. The forecast for the first-choice date really wasn't good at all and the decision was made to reschedule. (Ironically, the day before was perfect and several of us enjoyed an afternoon of free flight on the Meadow). In order to avoid a bank holiday, the event was rescheduled for two weeks later. It was all a bit tense, the days leading up to the new date were near perfect, but would it hold? The answer was "yes" and a fun time was had by all. Attendance was down a bit because there were some people (including myself) who had other plans in place for the new date (three nights in the campervan on a fishing lake in my case).

Those of you on the WhatsApp group will be aware that a parking meter has been installed in the Godstow (Wolvercote) car park. Really this shouldn't have been a big surprise, the real surprise is that it's been free up till now. The parking charge is £4.10 for 3 – 5 hours but then increases to £15 for more than 5 hours. This is obviously to discourage long term use and to generate in effect, more parking spaces. This is a problem for club competitions where at least 6 hours are required and it's also an issue for those that travel a long way, they need to stay long enough to make the journey worthwhile. We have written to the Council parks department, not objecting to the parking charge as such but objecting to the charge for longer than 5 hours, pointing out the problems this would cause us and suggesting an additional band of up to 8 hours. It's a 'watch this space' on this one.

As for myself, building wise, it's a slow plod I'm afraid but I did go to Old Warden for the Mayfly event on the Sunday and met up with a few club members. The weather was lovely, sunny and warm but the wind was just on the edge of flyable. I flew a Vic Smeed Tumbletot, which is a small (22 inch ?) model, electric powered in my case. It flew well and handled the wind but on one flight I must have launched into a thermal. It got high, and in the wind a long way away very quickly. I was just getting prepared to say goodbye to it when the motor run ended and it showed the glide slope of a housebrick. This saved the day and it landed by the RC area in an empty part of the car park. Big sigh of relief! This was a model that Pam built many years ago and it would have been sad to have lost it. It's a design I can really recommend as a small, chuck about model and Aeromodeller, in a Vic Smeed special, re-published the plan recently. It would make a good, small RC model as well, great for Begbroke. Mine has a Depron fuselage and tail feathers with a balsa built up wing. It flies well on a small, 5gram brushless motor.

Parish Notices – Andy Blackburn

Update to Autumn Duration and Fun-Fly

Following some serious and extensive discussions it has been decided to widen the scope of the Vintage and Classic Rubber Kit Revival competition; it's now open to British rubber kits pre-1961, maximum span 36" (measured with a tape measure), and it's also open to one-off (un-kitted) prototypes produced by a British kit manufacturer, and reissued Ripmax/KK kits. That's as far as the rules go, so we'll see how that works.

Under 25" Vintage Rubber Cabin Postal Competition

The annual Under 25" Vintage Rubber Cabin Postal competition is now under way, if you have a suitable model then I do encourage you to have a go, because it's loads of fun. Results will be posted as they come in, and there's still plenty of time to enter round one; the details of each round are:

Round 1 (Spring) runs from 1st May to 30th June.
Round 2 (Summer) runs from 1st July to 31st August.
Round 3 (Autumn) runs from 1st September to 31st October.

Slope Soaring

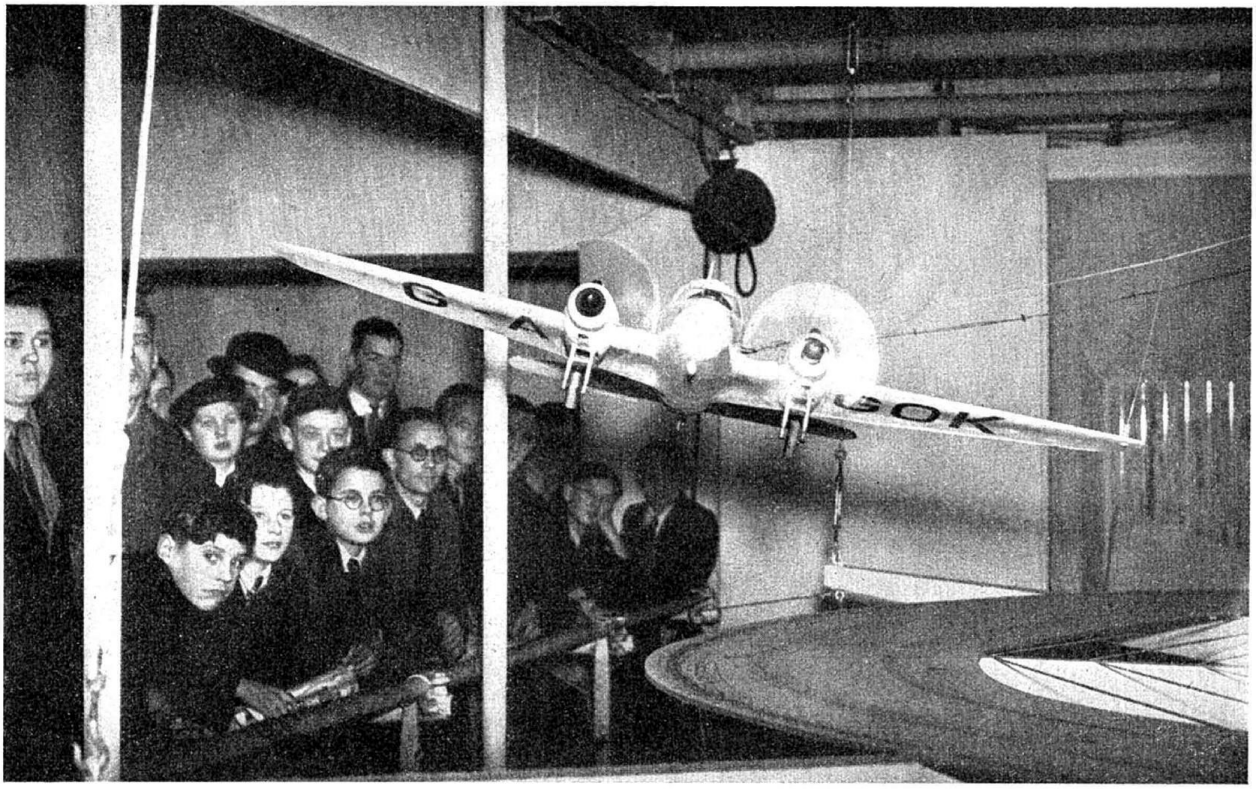
The Editor's o/d Canberra B.2 Slope Soarer at Ivinghoe Beacon

Simon Burch has produced a comprehensive article on Slope Soaring starting at page 16. One of my first grown-up RC flights in the 1980s was on a small slope north of Luton, I think it was called Barton Hills? I broke the model on landing but that didn't put me off, and I flew at Ivinghoe Beacon for years and years, I'm still a member of the Ivinghoe SA and I try to get to the slope on good days. Those of you that have never tried sloping are missing out on an experience – on the right day with the right model for the conditions it can be magical, and you can fly all day sometimes. If you're interested in having a go, there's an OMFC WhatsApp group specifically for soaring, Simon Burch can add you to it. Someone might even have a suitable spare model that you can have a go with…

Round The Pole Flying – Chris Brainwood

Round the pole (RTP) offers a great way to fly indoors in a small space. The models, often powered by small Scalextric type motors, are flown around a central pole using just throttle control, they can be simple to build and are able to perform aerobatics such as loops and wing overs and even engage in combat and carrier deck landing.

The idea is certainly not a new one, its origins can be traced back to just after the second world war. The annual model exhibitions in London were a popular attraction drawing large crowds. In 1945 the audience were wowed by the sight of a 1/12 scale electric Miles Magister flying inside an exhibition just off Regent Street. Flying on 7'6" lines it was a huge hit and flown so much during the event it wore its tyres out and got through 2 electric motors. Over the years that followed RTP became a central part of the model engineer exhibitions with ever more ambitious models. Multi-engine models were popular as were elaborate additional controls, the following year a 48" span twin engine Vickers Viking airliner thrilled the crowd with its retracting undercarriage.



A.T.P. Photo.

EXHIBITION HIGHLIGHT. An admiring crowd watches the electrically-driven Vickers Viking, under full throttle, climb rapidly away from its Perspex landing strip.

The model was quite a beast weighing 2 1/2lbs and powered by two 9oz 18v motors turning at 3,000rpm giving a flying speed of 25 mph. The undercarriage was controlled by a separate control panel with warning lights for gear position and a warning horn if the model went in a nose down attitude with the gear still up. The detailed plans were published on two sheets by Aeromodeller and are still available on Outerzone *[Thanks to Aeromodeller for permission to re-publish the photo - Ed]*. The lines also became longer for such models, 40 foot lines were flown in larger venues and allowed for a very realistic type of RTP flying.

As suitable electric motors became more easily available, often converted from slot car motors, RTP grew into a popular model flying discipline. Many Model Clubs, including Oxford

MFC, saw the attraction as a flying activity and had club set ups which they would run flying events and competitions during the winter months as well as putting on flying demonstrations at local fetes and events, where balloon bursting proved very popular with the crowds

The Oxford MFC RTP Equipment set-up outdoors.

The club's own RTP set has been specially built by Charlie Newman, Laurence Marks and Andy Stevenson. RTP is generally flown in an anti clockwise direction with a wire restraining hook fitted to the left side of the model. Power for the 12v electric motor is fed down the fine copper wires which are also used to restrain the model by the use of a ring attached to line. Power comes from a transformer plugged into the mains which has variable voltage. The voltage loss across the system can be quite large so on long lines up to 46v can be supplied by the transformer. Power is fed from the transformer to a speed controller built by Andy Stevenson, this features a spring loaded throttle control and a polarity reversing switch. The power is then fed to a ramp so the wire doesn't get in the way of the model and then to the pylon.

The ramp is another bespoke OMFC item made by Charlie Newman and features a core of flat copper strip allowing it to be just 1.5mm thick. The system can run two models at the same time for formation flying or contests such as combat with tissue streamers, though attention has to be paid to untangling the lines after a flying session. The central pylon which holds the pole also doubles as storage for most of the wiring. A large lead weight is fitted to base to prevent the pylon toppling over with the larger models.

As RTP became popular a number of companies set up to provide the parts and kits for flying, Harry Butler became the go-to supplier followed by Ballards in the 1990s. When Ballards stopped trading in 2014 The RTP Hut stepped in and continues to offer much of the old range as well as updated motors, controllers and new aircraft designs and kits.

Chris' profile Douglas Dauntless built from an RTP Hut Kit

RTP Hut currently offer a range of simple inexpensive profile kits for small motors that are ideal for Begbroke. For the more ambitious there are some larger kits including the shortly to be released Hercules 4 engined transport plane and profile Brittan-Norman Islander twin.

Charlie Newman has successfully converted several rubber models to RTP. His Focke-Wulf FW189 twin is very impressive in the air and features a scale engine startup where one engine will slow crank up ahead of the other when applying the power.

A Hawker Henley also proved a great performer converted to RTP and a specially built Piper Cherokee with suitably apt registration G-OMFC featured working nav lights. Charlie gave an impressive demonstration at the April Begbroke meeting showing just how good these models can look in flight. These models are quite large, the FW189 is 40" span, so are made for flying on long lines of up to 40', too big for regular flying at Begbroke but they can be flown outside on calm evenings on long lines.

Personal Experiences

My own experience of RTP as a youngster in the 1970's was building models converted from the KK Flying Scale series and Veron Tru Flight. A KK SE5a I remember flew very well. The most popular design at our local club though was the KK Nieuport with a geared motor. With the progressive use of the throttle to produce a series of wing overs it could be made to loop which was quite a sight on short 10-12 foot lines. Ceiling height at Begbroke prevents this but if flown outside it should be possible

As a young and inexperienced modeller in the 1970s the ability to experiment appealed to me and tried several, largely unsuccessful ideas. My profile helicopter with it's puny can motor simply shook itself to pieces. Undeterred I built a vectored thrust Hawker Harrier with balsa frame, enlarged intake and covered in paper... nope.. no chance but it made a nice howling sound.

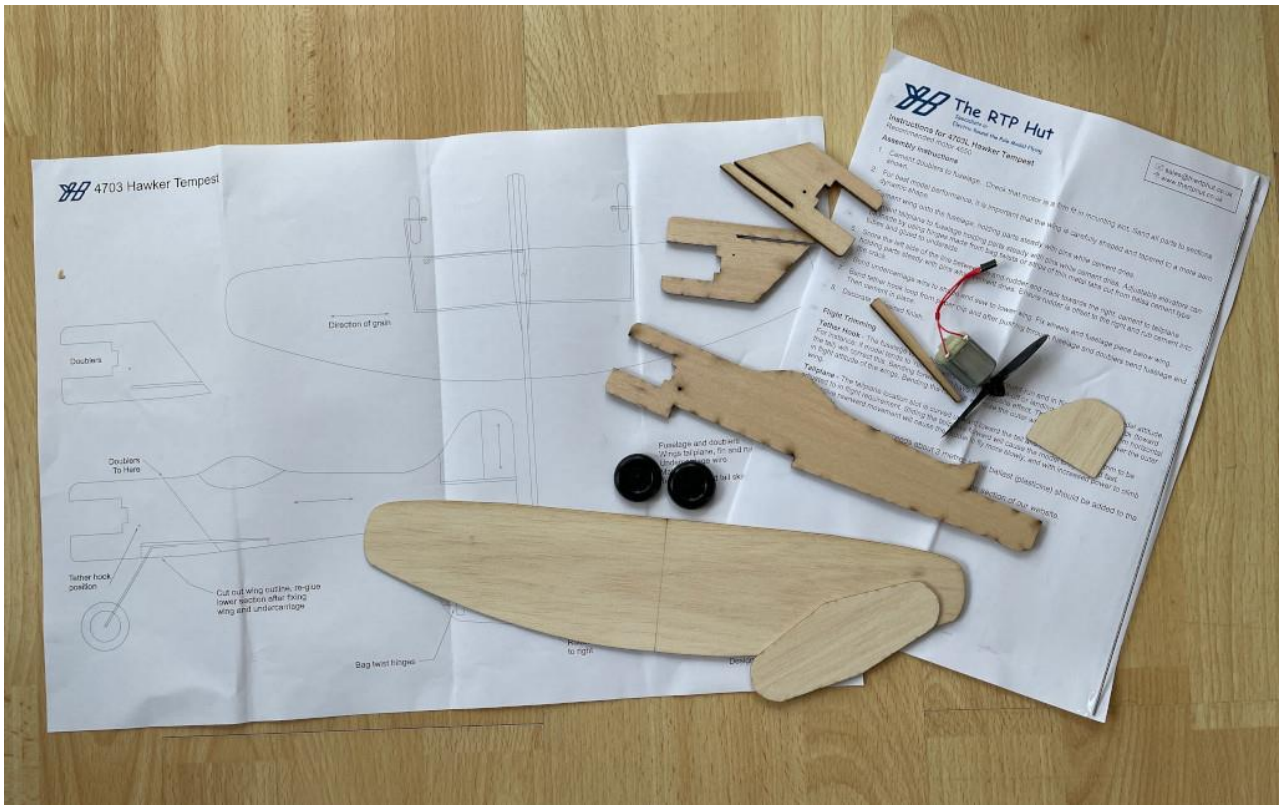
One success though was a hot airship which I built from an Aeromodeller plan. It was called the Flamingo and was originally designed as FF model, similar to the tissue hot air balloons that were once a popular floating fire hazard on calm summer evenings, I adapted it to round

the pole. It was 7 foot long and made from plastic bin liner material seam-welded together with a soldering iron. It had a balsa frame keel and a small gondola underneath in which I housed the electric can motor. To fly it you first inflated it with a hairdryer, then for the additional heat to maintain lift you lit some cotton wool soaked in methylated spirit which was placed in a foil pastry cup attached beneath a hole at the bottom of the thin plastic envelope - what could possibly go wrong?! Luckily it didn't, though when the power was applied it had a tendency to stand on its tail rather than move forward which was a bit alarming given the loose burning cotton wool inside. I seem to remember getting it to turn around the pole was tricky too so when I say success...

RTP At Begbroke During 2024

During the summer months when flying is happening at Begbroke the RTP set up will be available in the hall. Due to space restrictions for people to get past we will be flying on 9-10' lines but if the wind is calm we may be able to move the setup outside and fly on longer lines. For flying inside there is a restriction on using the small 4550 size motors

For the return of the Oxford MFC set up to summer flying I built one of the excellent kits from The RTP Hut. I went for the Hawker Tempest which including a small 'can' motor and postage came to under £20.



These kits are very straightforward to put together even for a raw beginner. Using PVA or some sort of wood glue, while taking a bit longer while you wait for it dry should make them a bit more durable than using superglue. Sanding the wing to a more aerodynamic profile will help too, as will rounding the leading edge and sanding down the rear part of the wing to give a finer trailing edge.

Make sure everything is square as you put it together; you could always pin the wings on until the glue dries. The rudder is scored and cracked to give some right rudder to hold tension in the lines when flying. An adjustable elevator is a good idea too, just one side should be

enough. Hinges can be cut from an old aluminium drinks can with scissors and a split carefully cut into the 1.5mm balsa tail and cyano'd in place.

The wire undercarriage is bent to shape, to attach the wheels a small piece of electrical insulation can be cyano'd to the end of the wire or a piece of brass tube soldered on. The undercarriage wire is literally stitched to wing with a needle and thread through the soft balsa wing. You only really need to do this forward facing part of the wire where it contacts the wing. This was then covered with a thin glue, Cyano would work well and left to dry.

The RTP hook came in the form of a paper clip and is simply bent to shape, pushed through the pre drilled hole and glued in place. The motor should be a tight push fit into the space in the fuselage. A few rubber bands around the nose help hold the motor in place

For decoration on mine I modified a No-Cal design available online to fit and printed this onto ordinary paper which was simply spray mounted on. The paper is perhaps a bit heavy and one decorated more conventionally would perform better but it does look the part.

The centre of gravity for RTP is very well forward, on these all-sheet models it is almost at the leading edge of the wing. The tether hook position is used to trim the model. If the model tends to run into the circle, bend the hook back towards the tail, if it's side slipping in flight to the outside of the circuit bend the hook in. The vertical position of hook will alter the bank angle. Bend the hook up to raise the outer wing, down to lower it.

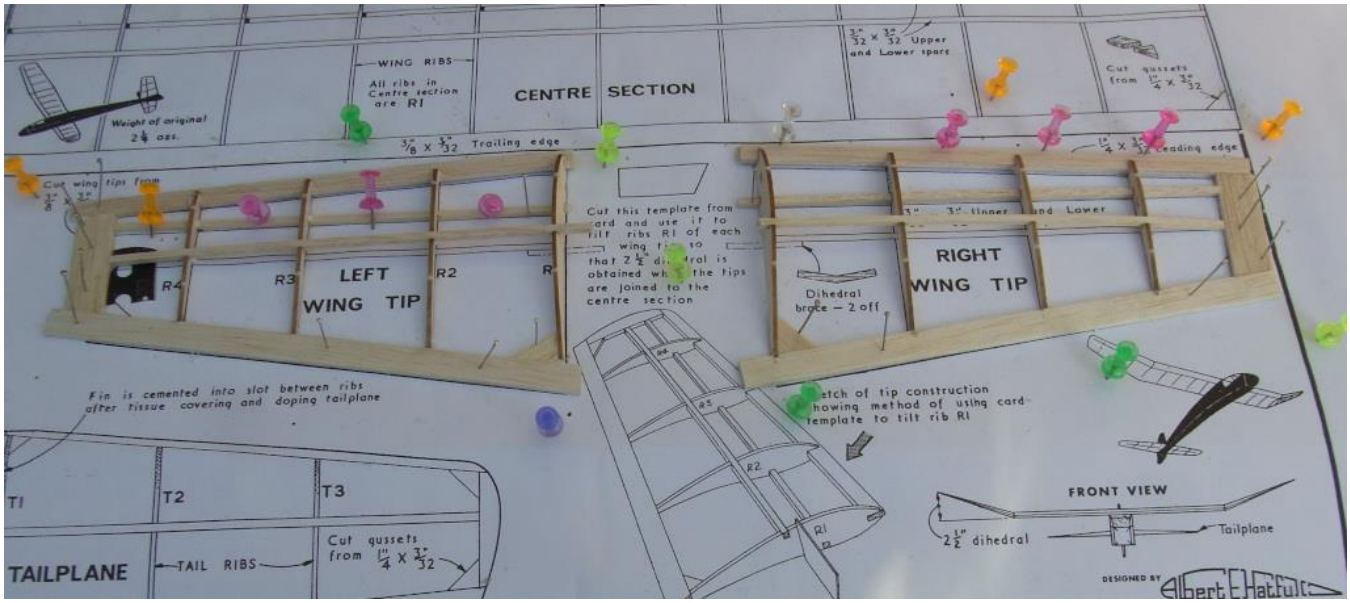
Some up elevator may be required as well to give level flight and where longer lines are used a small amount of tip weight on the outer wing maybe needed.

These models offer good cheap fun flying and it is hoped with enough interest we could offer some competitions such as carrier deck landing using a small arrestor hook to catch some lines held by bean bags.

For more information on RTP visit the club website RTP Page where a downloadable PDF written by Charlie Newman provides more details or set ups and model builds. Also check out The RTP Hut website - www.thertphut.co.uk

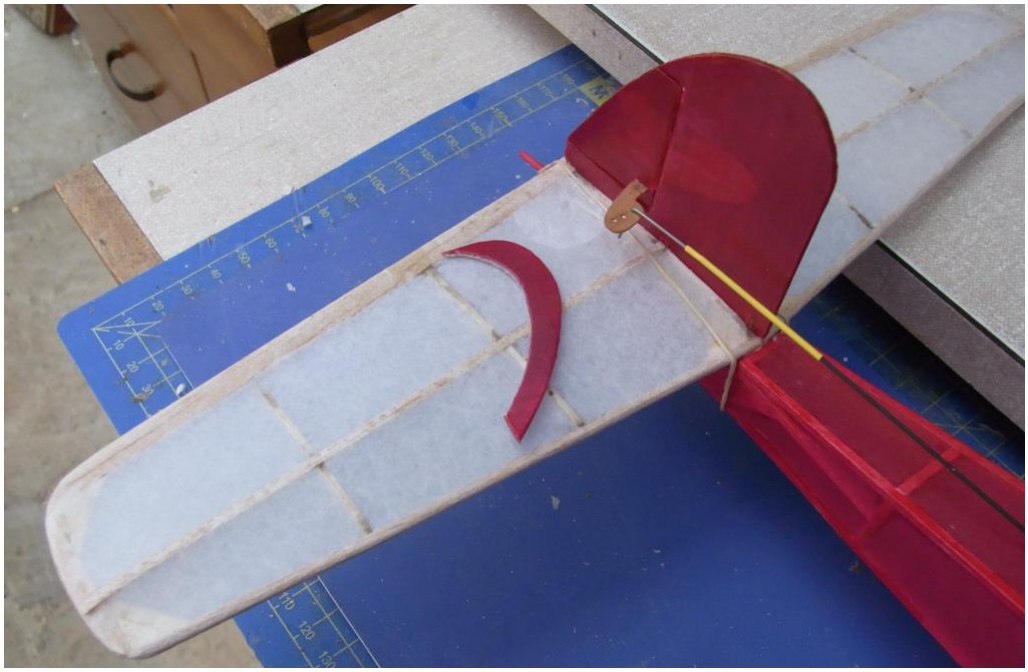
Vintage Model Company KK Dolphin – Alan Trinder

The kit was bought to enter the Vintage RC Assist FF Glider competition in August. It had the usual high-quality contents and the strip wood looked well chosen; soft for trailing edges and stiffer for longerons etc. However, I should have been more selective when building the fuselage – some strips were stiffer than others.



My first mistake was on the wing – I left the trailing edge flat on board when constructing. The wing has under-camber so of course the trailing edge should have been supported at the front to match the rib contour. The ribs were easily extracted from the sheet but were delicate at trailing edge, got away with only breaking one. Thought about carbon spar reinforcement *[banned – see rules. Ed]* but the completed wing seemed rigid enough with the three spars. We'll see...

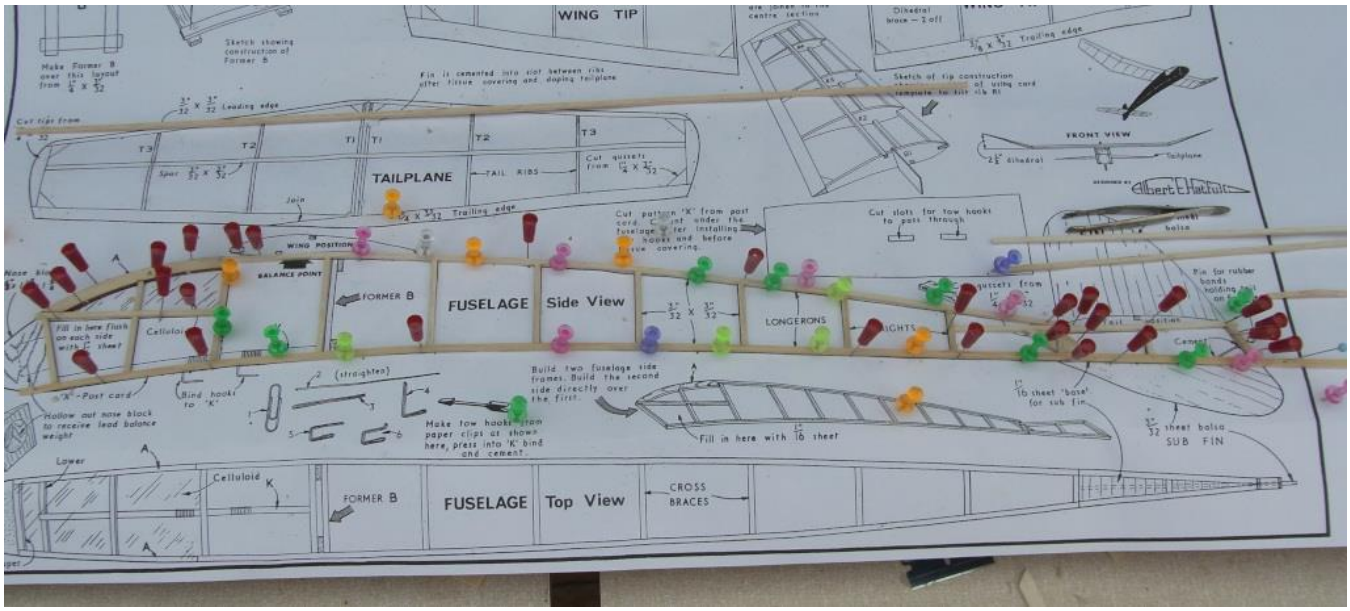
The tailplane was straightforward, there's no under-camber so it's all flat on board when constructing.



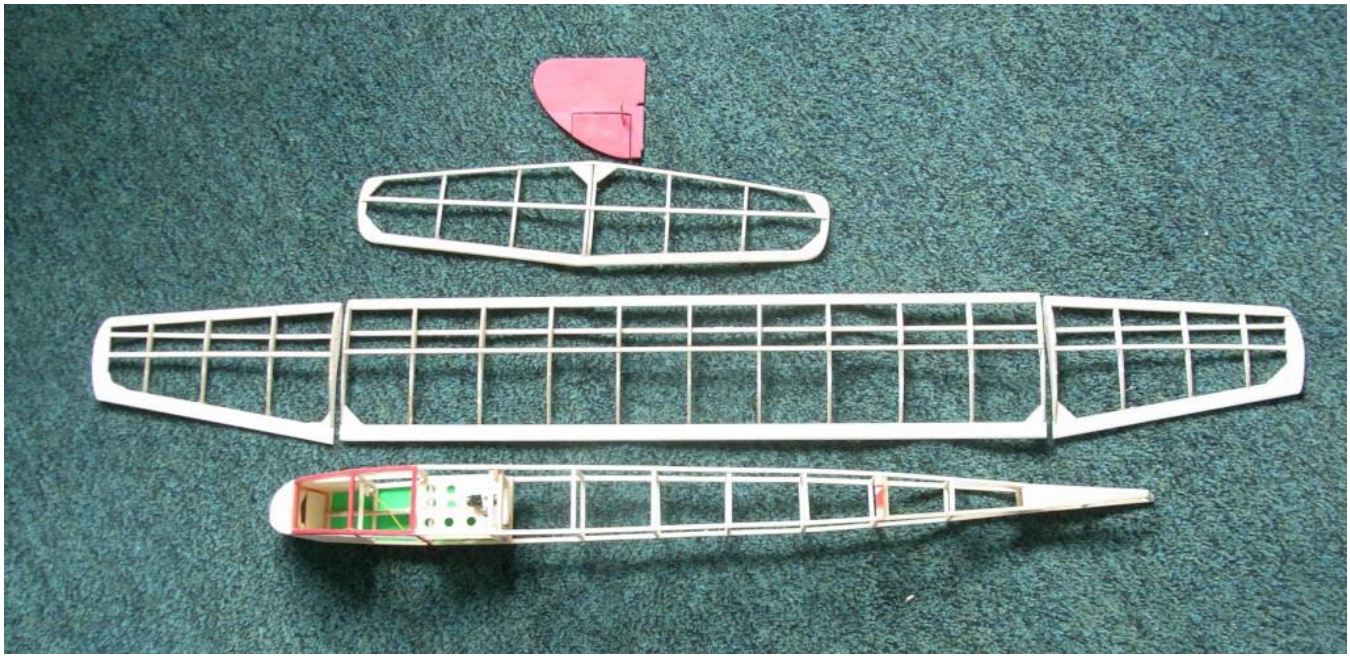
The fin was enlarged a little to ensure sufficient control from the rudder, but then I had to take the extra off again when it was pointed out that the rules don't allow a bigger fin.

I wasn't happy with design of the fuselage where tailplane support appeared almost as a separate "add-on." Was this because

Mr. Keil didn't have access to full length longerons? I stripped a couple full length from 3/32 balsa for bottom longerons as no strips supplied were full fuselage length.



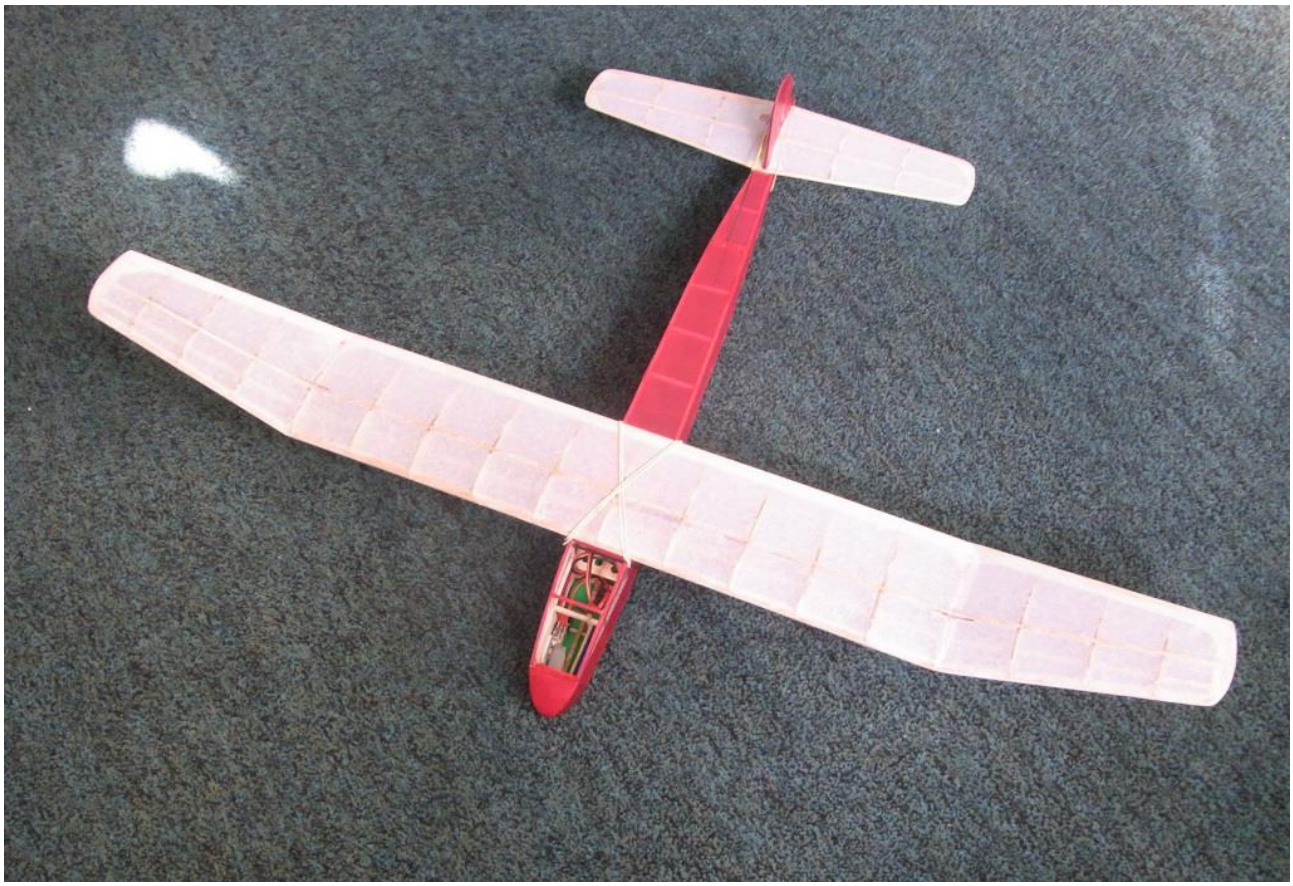
I also extended length of tailplane support longeron back into fuselage. Followed instructions to use bent paper clips as tow-hooks then realised piano wire in kit was obviously meant for the hooks.



Working out suitable location for electronics took a while, ended up with battery and receiver up against the nose block and the rudder servo at the C. of G. I used carbon fibre push rod with bent wire heat shrunk on for fin connection.

The supplied balsa block for nose was enormous so I used a smaller piece from stock. There's an interesting design feature with hollowed out rear of block to take nose weight – completely inaccessible once model covered. (Or am I missing something?).

I used the supplied tissue for wing and elevator. It seemed O.K. But very little wet strength. Couldn't get the tissue to completely follow the designed wing contour but I suspect a more skilful modeller would have managed it. I used red stock tissue for fuselage to get colour. On shrinking my error in not ensuring longerons were of equal stiffness became apparent. Not a “banana” fuselage but certainly a bit of a corkscrew. Fortunately, the tailplane and wing ended up almost aligned with each other.



On completion the fully assembled model with electronics and battery weighed in at 2ozs. “Brilliant” I thought, until I came to add nose weight to adjust C.of G. Weight prior to the first flight was 2.7 ozs.

Taking the Dolphin out for the first time was interesting. The plan recommends inserting weight in the nose block "through the cabin". Fine during construction but not so good on the field when the cabin roof is in place. Also, having watched Ken King's Flying Machines Dolphin video where his first flights all involved removing nose weight, I left the cabin cover off. Sure enough, my Dolphin was also significantly nose heavy and needed much of the nose weight removed. I suspect that the balance point on the plan is not ideal. Maybe Eddie Keil's balsa was heavier than today's?

Anyway, with the nose weight reduced and some packing under the wing leading edge the glide was fine - good enough to put the Dolphin in first place at the recent 36inch glider comp (without touching the rudder, obviously). Although repairs were needed after rescuing from some raspberry bushes on the Port Meadow allotments.

Getting Started in Free-Flight Rubber – Andy Blackburn

If you'd like to have a go at the Under 25" Vintage Rubber Cabin Postal competition but haven't got a suitable model, there's a well-known list of potentially-competitive models helpfully reproduced in the rules on the OMFC website and the top two or three of these are available as kits from the Vintage Model Company. The Keil Kraft Achilles can be built light, but it has a justifiable reputation for being tricky to trim. On balance, I'd say that the most accessible (and stylish!) model for a relative beginner is probably the Keil Kraft Eaglet designed by Bill Dean – you can build it from a kit or from the plan (available on Outerzone).

Mike Stuart's Keil Kraft Eaglet built from a genuine KK kit [Photo by Andy B]

The model will probably require some noseweight so try and keep the tail end light – the four main fuselage longerons and rear motor peg holder need to be quite stiff wood, but the rear fuselage diagonals and crosspieces can be quite light. If you make a decent job of it and cover it with tissue, I'd expect it to weigh 43-48 grams empty (without a Dethermalizer). It'll probably be flying to the right under power and on the glide, so a bit of left-rolling wing warp on the right wing (maybe 1/16"-3/32" washin, possibly more) is probably a good idea. Eaglets seem to need about 3 degrees right thrust and at least 3 degrees downthrust, or as much as 6 or 7 degrees downthrust if you use a powerful motor. Finally, you may find that the outer part of the wing needs to be covered in separate pieces to avoid wrinkles.

Bedtime Reading

The best thing to do if you've not done this sort of thing before (or you have done it before – as in my case – but it was several tens of years ago) is to get hold of a copy of Don Ross' book "Rubber Powered model Airplanes" – it really is a gold mine where rubber flying is concerned.

Propeller
The rules state that the maximum prop size is 8” but this isn’t a big restriction; if you’ve managed to build light and are using the smallest motor (see below) then you’re probably fine using the prop in the kit which is a Peck-pattern prop of (I think) 8 inches diameter. If you’re using a more powerful motor then you’re probably a bit better off with an 8” Igra prop, which is available from Free Flight Supplies.

Propshaft and Hook
In either case, you’re going to need a reverse-S hook (or some similar solution) in place of the rather basic prop shaft supplied with the kit, otherwise the rubber will crawl forward on the hook and unbalance everything. There are a number of YouTube videos showing how to make a reverse S hook, the easiest process is probably the one shown on MaxFliArt’s Free Flight Basics #3 – other videos and how-tos are available, just do an Internet search. If you’re not confident about doing a bit of wire bending, ask a more skilled club member to bend one for you or drop me a line.

Dethermalizer
There are loads of videos and documents showing you how to set-up a Dethermalizer, the simplest one is probably one done by MaxFliArt but do look at some others The principle is that you attach some hooks to the tailplane so that it tips forwards under the tension of one or more rubber bands, and then you hold it down at the trailing edge with some non-stretching thread such as fishing line (I have more than I’ll ever need of this, so please let me know if you want some) or dental floss. The mechanism to release it can be a simple viscous button timer, but most people these days use a band-burner powered by a small 1s LiPo, both of which are available from BMK’s Free Flight Store.

Rubber
The plan claims that the model needs 8 strands (four loops) of 3/16” (!!) – this *must* assume the use of some rather weedy 1940s vintage Dunlop 3/16” rubber strip cut from motorcycle inner tubes. My similarly-sized Achilles has 4 strands of 3/16” FAI rubber and it has a very good climb, I wouldn’t want to try much more.

You usually want to start with a motor that’s about twice the distance between the hook and rear peg, and about 25-30% of the overall weight; you might consider trying one of the following rubber motor set-ups produced using the info in Don Ross’ book, and experience with similar models:

Motor Size	Relative Power	Break Turns Per Inch	80% Max Turns
1 loop 1/4" 25” long	Low	69	1380
3 loops 3/32” 25” long	Medium	62 (est.)	1240
2 loops 3/16” 25” long	High	59	1180

If you treat the motor nicely, lubricate it properly, break it in carefully, stretch-wind it properly and let it rest for at least 10 minutes between windings, then it’ll take 80% max stretch-wound turns all day. And if you braid the motor (about 100-150 turns is usually enough), remember to take that number of turns off the number of turns that you can wind to.

Happy thermal hunting!

Slope-Soaring Made Easy – Simon Burch

With clean, renewable and abundant power available free of charge, great views, and minimal equipment requirements, slope soaring must surely be the best of all RC flying disciplines. In the right conditions, the wind can provide sufficient power to fly fast low passes and big, dramatic aerobatic manoeuvres for as long as your TX and RX batteries will last, while gentle breezes can enable a 'floaty' glider to stay in the air for hours without the bother of having to seek out those elusive and ephemeral thermals.

A Kema 90 "traditional" aerobatic glider at St Agnes Head, Cornwall

Of course, that's only my opinion, but I hope to persuade you to give it a try. The aim of this article is to convince you that slope soaring, while certainly challenging, is not too difficult, and to provide some useful guidance for those all-important first steps.

Slope soaring models can be simple and cheap, and with no motor to worry about, they require minimal ground support equipment. Of course, it's possible to spend a very large amount of money on an ultra-light carbon fibre wunderplane, but the simplest and cheapest models are capable of delivering bags of enjoyment too. The choice is yours. They come in many shapes and sizes, from small 25" span 'bank flyers' to large scale gliders. Some exotic models are capable of reaching very high speeds; indeed, the current world speed record for a model aircraft is held by a slope soaring glider (548mph). Others are 'floaty' models optimised for relaxing flying in gentle breezes. A popular sub-genre of slope soaring which is worth a special mention is Power Scale Slope (PSS), where unpowered scale or semi-scale models of powered aircraft such as warbirds and jets are flown as gliders.

How does it Work?

The principle of slope soaring is very simple: wind blowing up a slope generates a rising current of air known as 'orographic uplift' (see Figure (i)). Model gliders can use this to gain height – just like full-size gliders, hang-gliders, para-sails and birds. For simplicity, I'll refer to this rising air as 'lift'. Note that it is independent from any thermal activity – although that might

be present too. Classic slope soaring with a heavy-ish model requires a fairly brisk breeze – say 10-12 mph or more – and, to generate the best lift, it needs to be blowing within plus or minus 20° of perpendicular towards the slope. Very little lift is generated beyond 40° off the perpendicular (see Fig (ii)).

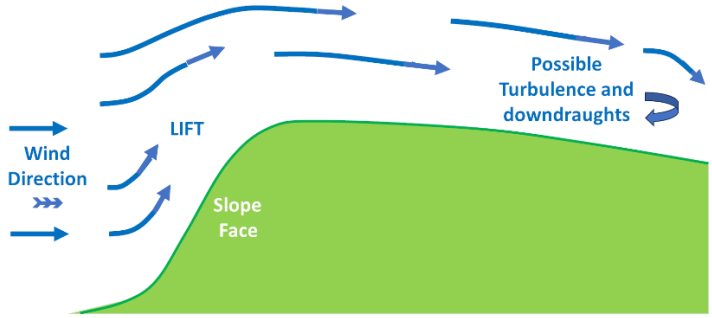


Fig (i) - Orographic Uplift

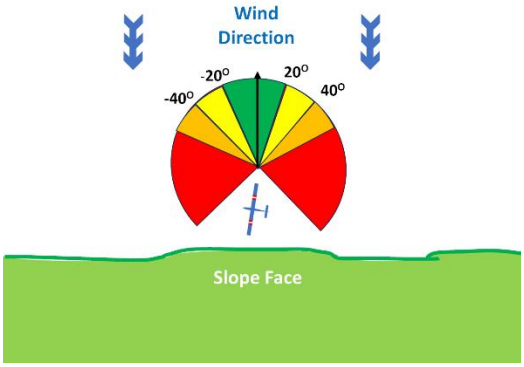


Fig (ii) - Wind Angle and Lift

Wind blowing away from a slope (ie down the hill) can sometimes generate lift too, but that's a subject for another article entitled 'Dynamic Soaring'.

Slope Model Characteristics

Slope lift is usually stronger and more consistent than lift from flat-field thermals, so traditional slope soaring gliders are usually more heavily built, more robust, and have a higher wing loading than thermal gliders. These features help the glider to penetrate into stronger winds, and enhance their stability in turbulent conditions. They also help the models to cope with landings on rough ground. Slope landing sites are usually uneven and covered with tough vegetation such as heather or gorse; they often have a liberal scattering of tussocks, stones and rocks. Expect a slope model to have no undercarriage apart from, perhaps, a skid or wheel mainly for scale appearance); a solid nose; an all-sheet fuselage and reinforced wing leading edges. Tailplanes can be particularly vulnerable to damage on landing, so T tails and V tails, which provide additional ground clearance, are a common feature.

Banded-on wings are still frequently used; these allow the wings to move independently from the fuselage should they strike an object on landing, which reduces the chance of damage. Of course, it's also possible to fly thermal gliders using slope lift, but only in very light wind conditions and in places where there is a suitable landing area.

Starting Out

If you are a complete newcomer to RC flying, I suggest that slope soaring isn't the ideal place to start - although it is entirely possible. Instead, I recommend learning the basics on a thermal glider (pure or electric), or standard fixed-wing power trainer, before venturing out onto the windy slopes. Even if you are already a reasonably competent RC flyer, I strongly recommend being accompanied by an experienced slope flyer for your first attempt and consider a buddy lead. Slope flying isn't particularly difficult, but there are pitfalls and each site has its own unique characteristics. Guidance from someone who knows what they are doing, and has experience at the site, is invaluable. Even now, I try to seek advice from local flyers before trying out a new site – something which the advent of social media has made a lot easier. You'll find that slope flyers tend to be a relaxed, friendly people who are only too willing to help.

Slope Trainer Models

Chris Foss Middle Phase – a Superb Slope Trainer

For those starting out in slope soaring, as with any RC discipline, it is important to choose the correct type of trainer. Traditionally, the Chris Foss Middle Phase glider, using rudder and elevator control, was justifiably considered to be the 'go to' primary slope trainer. This model has the advantage of being available with two wing options – with or without ailerons - allowing a beginner to start with a simple rudder-elevator version, and then move on easily to an aileron model. This popular kit is still available.

Of course, there are numerous other similar types which are just as suitable for those first steps. My own first slope soarer was a semi-scale rudder-elevator Cambrian Slingsby Capstan. This is a good-looking model, and it is still available in kit form. My second slope soarer was a Precedent Hi-Fly; not as good-looking as the Capstan, but probably a better trainer. Sadly, this excellent kit is no longer produced, but they occasionally come up on eBay. If you are happy with building from plans, your choice is huge; there are numerous classic slope soarer designs available on Outerzone and other such sites.

Me With my Cambrian Slingsby Capstan (Tregonning Hill Cornwall 1980)

Any of the models that I have suggested, or similar ones, would be an excellent choice for a slope beginner; however, if I were starting out now, I probably wouldn't choose any of them. Instead, I'd opt for a 2-channel foamie flying wing, such as the SAS Wildthing or Dreamflight Weasle. These simple models might be eschewed by purists, but they are cheap, light and incredibly robust; they can withstand crashes that would turn a traditional balsa and ply model (known as a 'crunchie') to matchwood. They can routinely be landed (or semi-crashed) on ground that would be unacceptable for more fragile models. This feature effectively increases the number of useable sites, because a smooth-ish, flat area is not essential for landings; indeed, a fast landing on the slope face itself routine – though not recommended for beginners.

Flying Wings 'Yeti' Foamie Wing

Of course, flying wings tend to have less inherent stability than traditional rudder/elevator trainers, and their unconventional shape can lead to orientation problems. This means that they can be slightly more challenging to fly than a conventional model; however, with appropriate use of rates and exponential, they can possess surprisingly docile handling characteristics. Once you are confident enough, the rates and exponential can be adjusted to provide much more exciting and challenging aerobatic performance – albeit with less inertia than a heavier, conventional model. I would also want to prepare thoroughly by practising basic slope techniques on an RC simulator (more about this later).

An added bonus with foam wing-type models is that they are so easy to transport. Many will fit on the parcel shelf of a car, and they are far less prone to damage from other items being thrown on top of them. Very little ground support equipment is needed at the flying site; other than the TX, I usually carry a reel of fibre-reinforced tape, a craft knife, and a small RX battery tester. All this means that a foam wing can be packed unobtrusively in the car on almost any

trip, allowing you to take advantage of an opportunity to go flying should it arise. My own 'Yeti' flying wing fits nicely on the parcel shelf, and place folded coats, jumpers or waterproofs on top to protect it from the sun.

Ground Support Equipment and Batteries

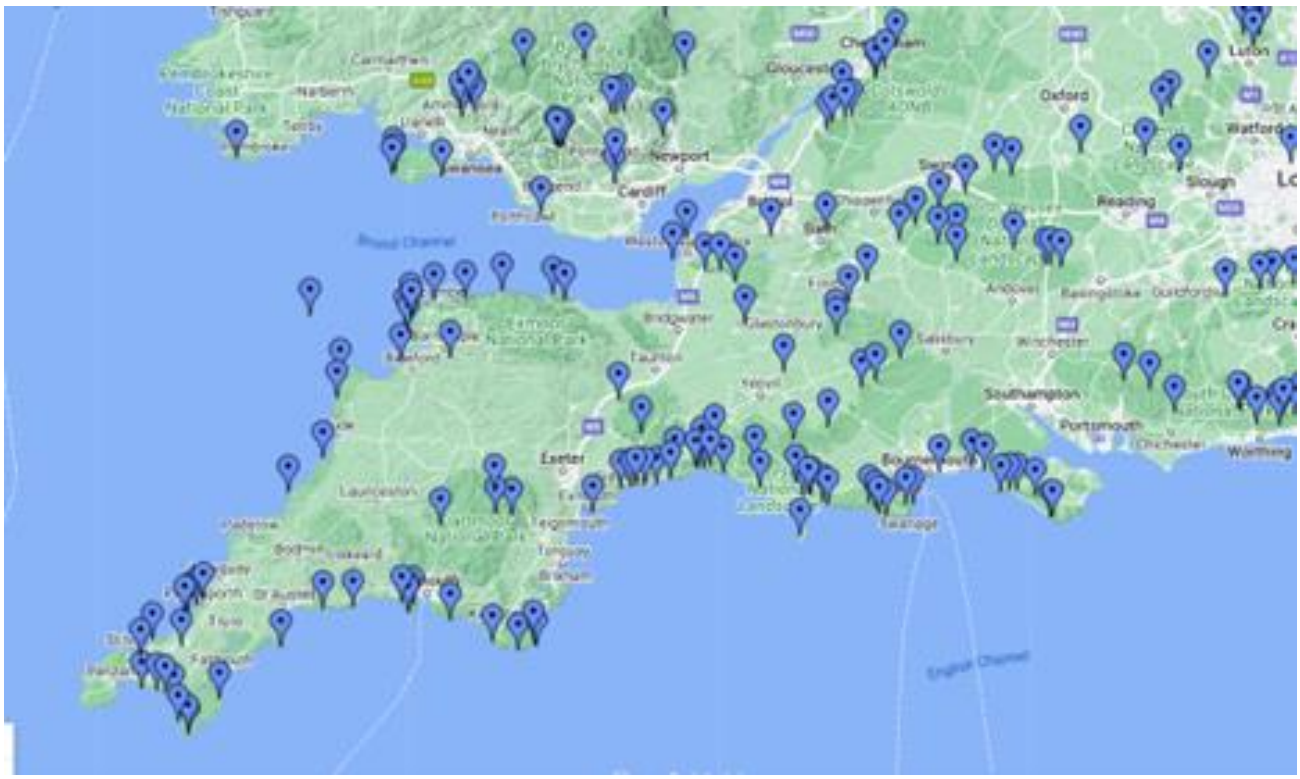
One of the advantages of slope-soaring is that it doesn't need much additional ground equipment beyond the TX. One item that I would strongly recommend taking is an RX battery tester with a test load facility. This is a simple and cheap device which enables you not only to check the battery voltage, but also to check that it holds up under load. This is very important for slope soaring, because flights can be long and a strong RX battery is essential. Slope soaring is usually more dynamic than thermal soaring, and the servos are often in more-or-less constant use. I recommend that your RX battery should be the highest capacity NiMh or LiPo that will fit into your glider (commensurate with CG position), and it should be fully charged at the start of the session. Other than that, you might consider small tools for wing bolts and adjusting clevises, linkages etc, tape for minor repairs (and a means of cutting it), a spare RX battery, and spare wing bolts or bands. If you have a foamie, take some cocktail sticks for reinforcing field repairs.

Finding a Flying Site

The ideal slope site is a smooth escarpment ridge facing directly into wind, rising in excess of 100ft above flat ground, with a gentle dip slope or flat ground behind to provide a landing area. There should be no trees, buildings or other obstructions that might cause turbulence, and there should be a free car park with a café situated within easy walking distance of the flying area. There are many slopes in the UK that come close to meeting those criteria. Coastal cliffs can make excellent sites, with wind off the sea providing smooth lift, and the UK has some superb inland sites such as Long Mynd in Shropshire and Ivinghoe Beacon in Buckinghamshire.

Woolacombe Bay in North Devon – Excellent in the UK's Prevailing Westerly Winds

There is an excellent Google Maps site called 'Slopehunter', which shows the location of slope sites and their favourable wind directions, mainly in southern England and Wales. Sadly, the site is not maintained; however, the physical geography of the UK doesn't change much, so it's still a useful reference. See https://goo.gl/maps/11TbatVGofoBWyon7



Slopehunter Screenshot

What does change, however, is regulation. The National Trust which, for many slope soaring sites, is the landowner has historically welcomed unpowered model flying. However, over the past couple of years, some slope sites have had model flying activity either banned completely or severely curtailed – allegedly under the influence of a quango called 'Natural England'. Rogue drone flyers haven't helped, but growing concerns about conservation, and in particular the disturbance of nesting birds, has undoubtedly led to an increase in restrictions. To the uninformed conservationist, drones are a nuisance and model aircraft are noisy, obtrusive and annoying things, and banning them is an easy option.

Of course, the reality is that slope-soaring must be one of the least obtrusive and most environmentally friendly air-sports of all, but breaking the rules won't help our case. The important thing for us is to make sure that we comply with any local restrictions. The best way to do this is to fly only at recognised sites, and ask local flyers for advice, and support any campaigns to retain flying sites.

For OMFC, our local slope soaring site is Wittenham Clumps. You can find a description on the website. The Clumps are low but they can sometimes offer good lift; however, they are usually very busy with walkers and picknickers, and the landing areas can be a little tricky. The site is best suited to 'floaty' gliders, or foamies that can withstand landing in brambles, revetments etc. Consequently, The Clumps are by no means perfect for slope beginners. White Horse or Ivinghoe Beacon are further away, but they are better sites to use for those early steps.

Slope Soaring Basics

Checks. Once you arrive at your carefully chosen site with your carefully chosen model, in a good 10-15 mph breeze, you'll be in a hurry to start flying. Don't be in too much of a rush, though; carry out the SWEETS checks, check your model in accordance with the BMFA's recommendations, and load-test the RX battery. I have seen a slope soarer launched without the RX being switched on, and the result isn't pretty. Personally, before committing my model

to a launch over the slope, I'll often test-glide it out of the lift first – usually over the landing area if it's clear.

The Launch. Before your first launch, you should plan how you will make your approach pattern and landing (I'll cover how to circuit, approach, and landing later). Be ready to experience some nervousness – the first time that you launch a model over a cliff or hill, with no chance of making an immediate landing, it can be disconcerting. If there are other flyers around, check to see if there is an established pattern, and watch what they do. Do the SMART checks, walk out to a launch position near the top of the slope. You should feel the up-draughting air, and when you hold your model up ready for launch it should feel as though it wants to fly. At this point, I usually do a last-minute 'idiot check' with the controls, making sure that they are responding by waggling the right-hand stuck. Have a good look around, and call 'launching'. The model should require no more than a gentle throw, and it should start to climb more-or-less straight away. Allow the model to climb away from the slope, keeping it straight by using gentle rudder or aileron inputs. Control the rate of climb gently using elevator and take particular care to correct any tendency to pitch nose-up; this often happens as the model moves forward into stronger lift and, left uncorrected, it can quickly lead to a stall. If you find that you need an excessive amount of forward stick to hold the nose down, by all means re-trim, but consider landing – or asking your mentor to take control and land the model for you. Once on the ground, add some ballast to the nose to bring the CG forward, recentralise the trim, and try again.

Continue the climb, but don't go excessively high. Keeping the model at or just above head height will do. Once you're at a safe distance from the slope, you can begin your first turn – either left or right: it doesn't matter unless there are other aircraft about. Check it's clear, and begin your turn, let's say to the right, with gentle application of right stick. You shouldn't need too much up elevator to turn; the lift will tend to keep the nose up for you. Be ready: the wind will blow the model towards the slope quite quickly, so don't turn too much or too far: aim to track parallel to the slope. The nose will need to point slightly left towards the wind, and the model will 'crab' away from you to the right. Try to avoid allowing the model to drift towards the slope. If it does, don't panic: gently apply left stick and perhaps a little up elevator to correct this (see Fig (iii)).

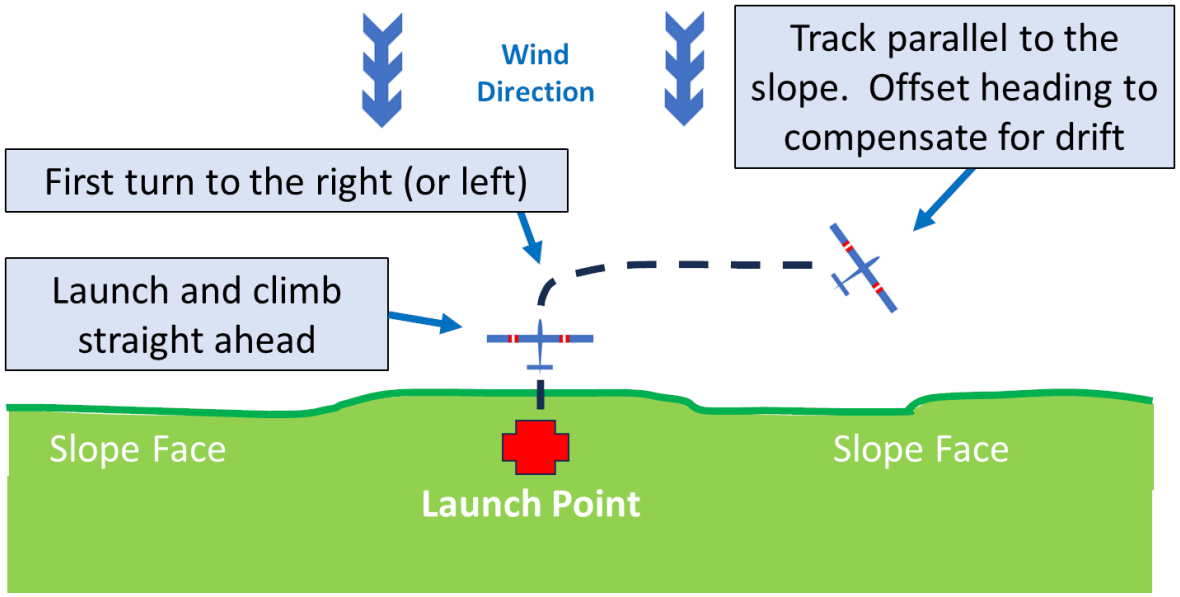


Fig (iii) - Climb and First Turn

Before the model gets too far away, start to turn left away from the slope. It will appear to slow down as it turns into the wind. Continue turning left, through the wind, until the model is tracking parallel with the slope from right to left; to do this, the nose will need to be offset slightly to the right (see Fig (iv)).

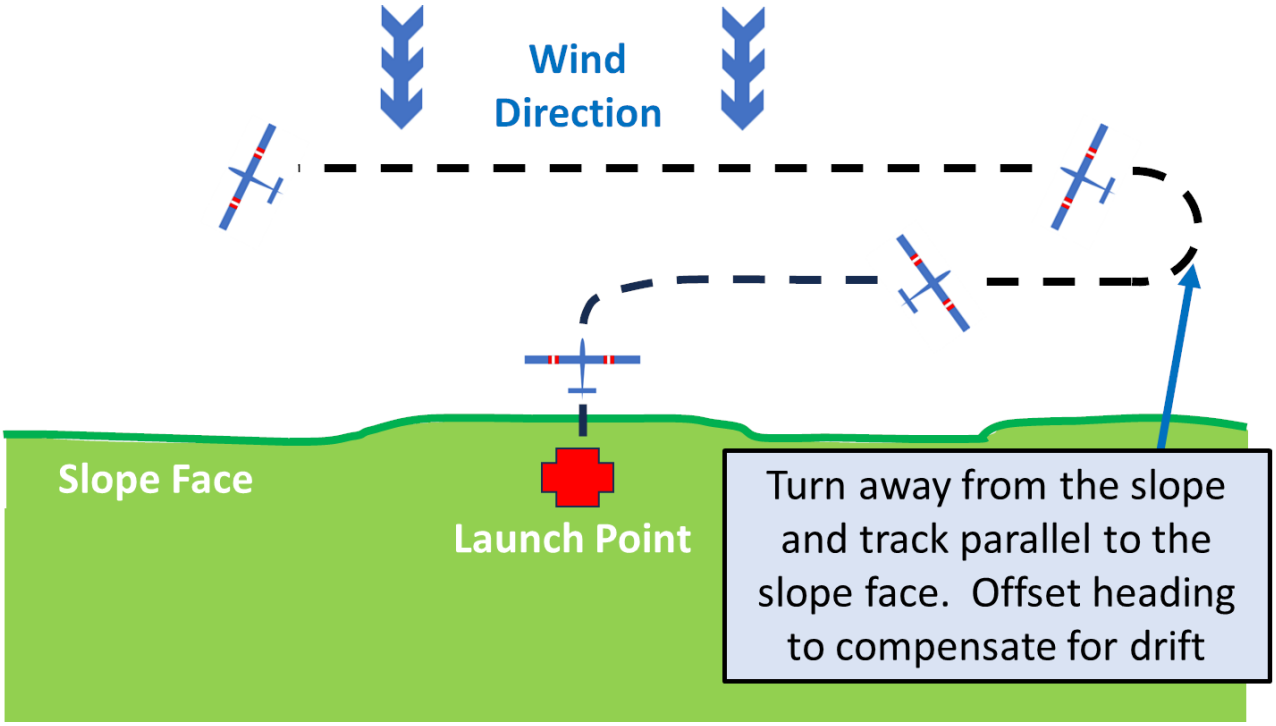


Fig (iv) - Second Turn to Parallel Slope Face

Again, don't let the model get too far away; as soon as you are ready, begin a turn to the right away from the slope, and continue the turn until the model is tracking from left to right along the line of the slope. Gradually, you can widen the turns and allow the model to drift slightly towards the slope on each leg, forming the classic 'figure of eight' training pattern (see Fig (v)).

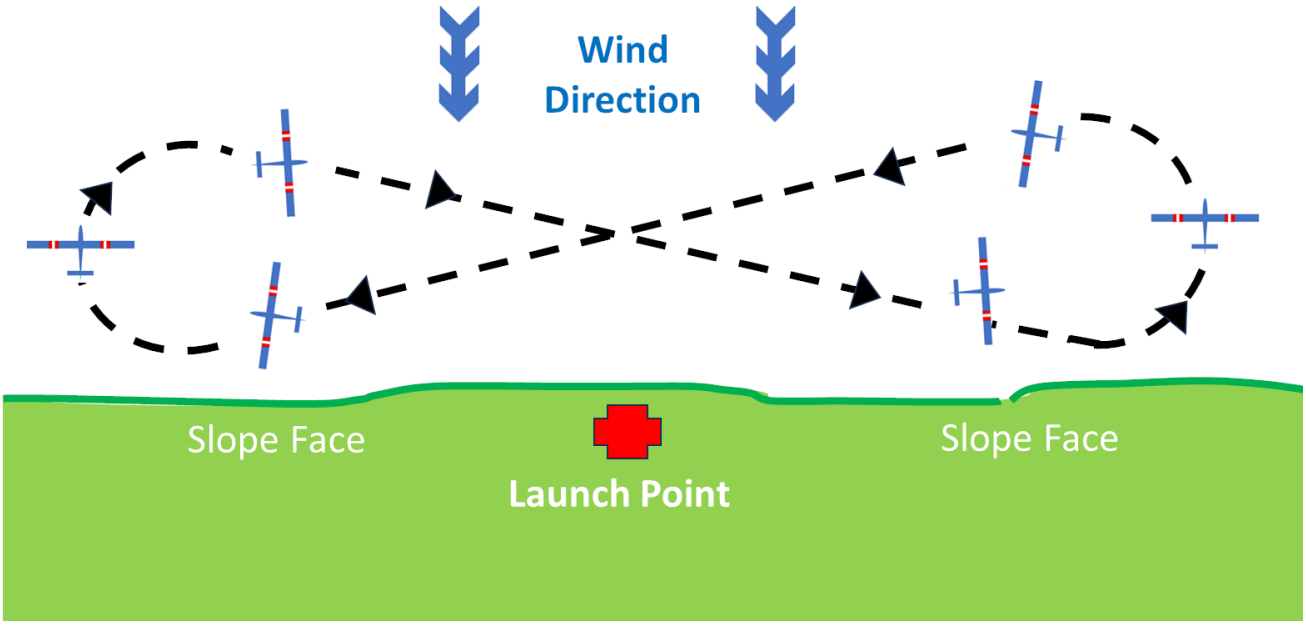


Fig (v) - Figure-of-Eight Pattern

Continue flying figure of eights until you are comfortable with the conditions and the way that the model is handling. You'll notice that the lift is variable; indeed, you might even encounter some 'sink'. If you do, simply fly back to an area where you know the lift is good. Be ready for turbulence; not all the model's unexpected movement is down to you.

Once again, if you encounter turbulence, avoid overcontrolling to compensate and fly back to an area of known smooth air. At this stage, I recommend making all turns away from the slope, and don't try anything ambitious until you feel comfortable with the new environment. Finally, don't fly too far away from the slope – there's a risk that you'll fly out of the lift and lose a lot of height….which you might not be able to recover!

Approach Pattern and Landing. Hopefully, you'll have planned how you are going to fly your approach and landing pattern before you launched so, assuming that nothing has changed since then, all that remains to be done is to execute that plan. If you've never seen a 'classic' slope approach and landing, it's worth asking your mentor to demonstrate it to you; if nothing else, a demonstration will prepare you for the slightly disconcerting pace of the downwind leg.

Let's assume that you've chosen to fly a right-hand pattern. Start by tracking the model along the line of the slope from left to right, at about 50ft to 100ft above the height of the landing area. This is lower than you might expect, but you need to keep clear of down-draughting, and it can be surprisingly difficult to lose sufficient height to make a landing. When the model is at a suitable distance to the right (in this case) of your position, call 'landing' and begin a turn to the right, to cross the slope face, onto the downwind leg.

The model should be well above the terrain but be ready for its groundspeed (not airspeed) to increase markedly as passes over the top of the hill. Don't be tempted to slow down by raising the nose or you'll risk a stall, and take care not to fly too far downwind (see 'common approach pattern errors').

As the model flies out of the lift, it will start to descend; you might encounter some turbulence too, but don't worry. When it passes the landing point, begin another right turn. Depending upon your spacing from the landing point, you can either turn onto a 'base leg' or simply continue the turn into wind and onto the final approach. The model's groundspeed will slow reassuringly quickly as it turns into wind, but beware of a tendency for it to pitch nose-up. On the final approach, keep straight, control pitch attitude with elevator, and allow the glider to descend towards the landing point.

For the touchdown, try to keep straight; groundspeed should already be relatively low, so you'll need minimal flare. See Figs (vi) and (vii). Accuracy is not essential at this stage, and remember the old adage that it is better to walk 100m to pick up the model than 10m to pick up the wreckage.

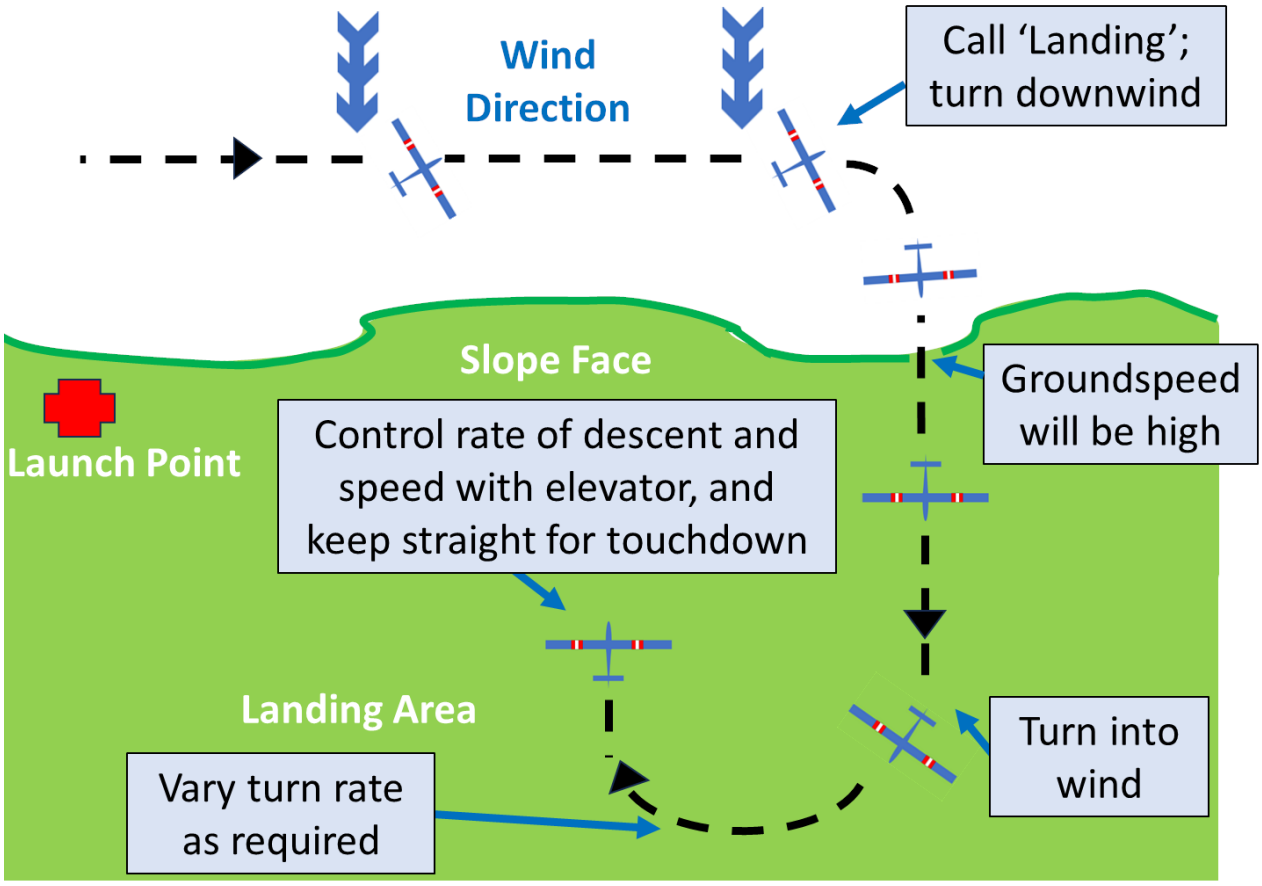


Fig (vi) - Classic Slope Landing Pattern

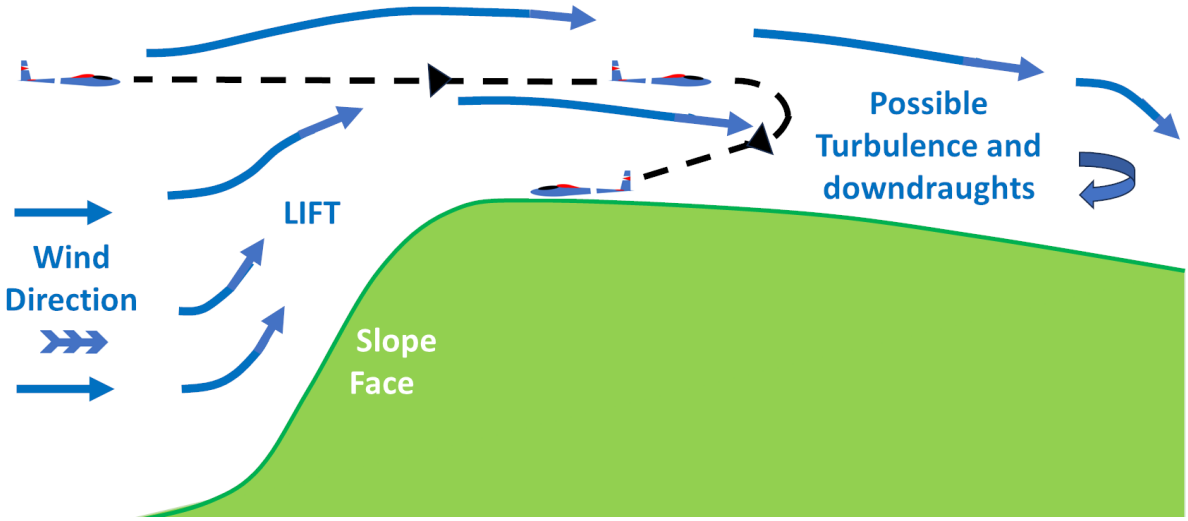


Fig (vii) - Classic Slope Landing Pattern (Cross Section)

The 'S' Turn Manoeuvre. If you find that you are too high at the end of the downwind leg, one method of losing the excess height before the final approach is use the 'S' turn technique (see Fig (viii)). Effectively, this increases the glider's ground track distance, allowing it more time to descend out of the lift, while keeping it clear of excessive turbulence and down-draughting.

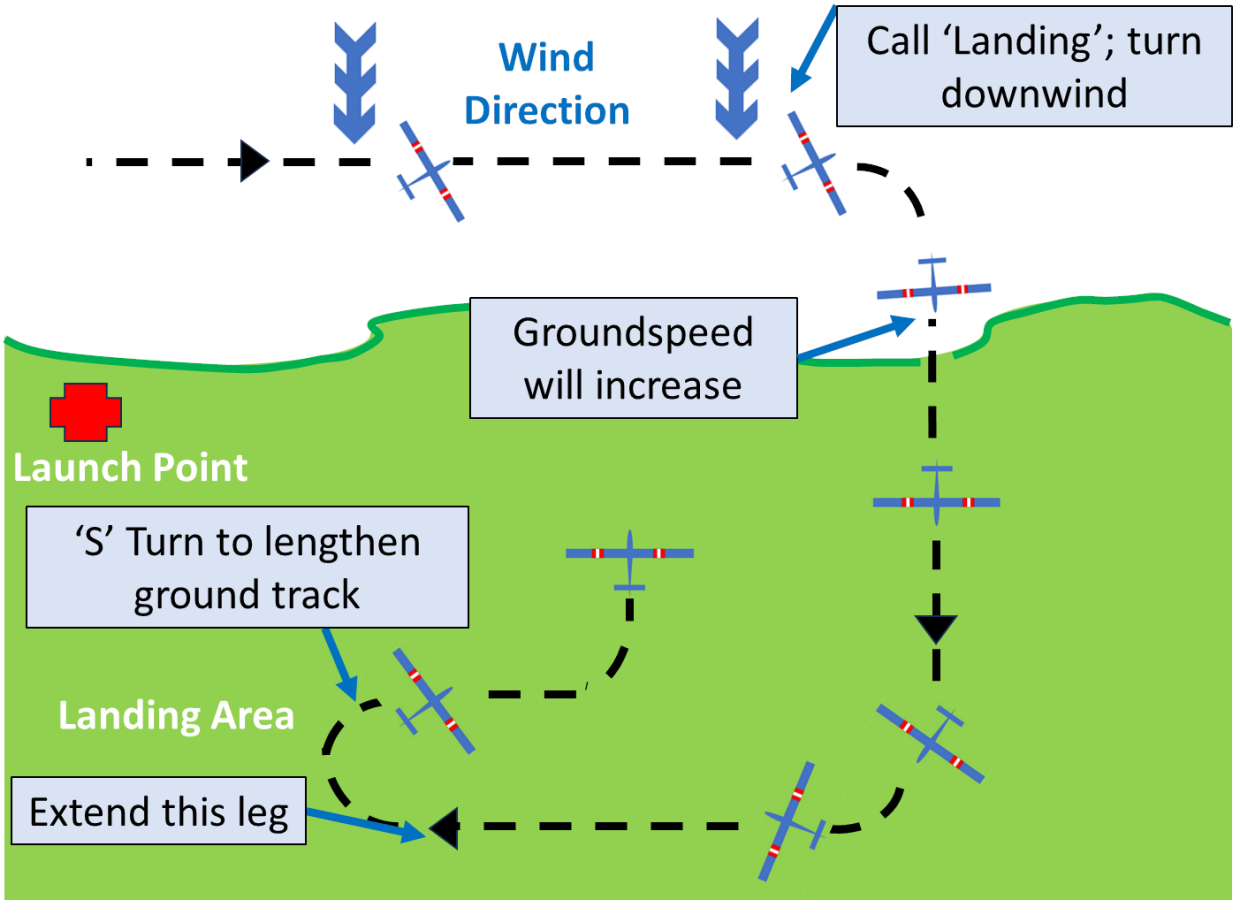


Fig (viii) - Using 'S' Turns to Allow More Space to Descend

Begin by extending the base leg cross-wind, taking care to allow for drift. At a suitable point, turn the glider towards the wind, and continue the turn to fly a reciprocal track, again allowing for drift. When you judge that you are at a suitable height to begin your approach, turn into wind and land as before. It is possible to carry out more than one S turn, but avoid manoeuvring too close to the ground. Consider going around and trying again instead.

If you have an aileron/rudder/elevator model, it is also possible to lose excess height by side-slipping, but this can be a challenging manoeuvre if you're not familiar with it. More advanced models are often fitted with spoilers or crow-braking, which makes it much easier to lose height and/or speed, but these are complications which, as a beginner, you don't need.

The Go-around Manoeuvre. The main reason for conducting a go-around manoeuvre is because you are unhappy with your approach; however, there are others: for example, you might see an unexpected hazard (eg loose dog, or hikers), you are baulked by another model, or you can see that you will miss the landing point and end up in brambles or rocks. Don't forget that it can also be a good idea to use a planned go-around as a way of assessing the wind and turbulence conditions on the final approach path – a so-called 'dummy approach'. Of course, unlike a powered model, you can't simply open the throttle: you need to fly back into the lift. For this reason, you need to make your decision to go around early. Fortunately, the manoeuvre itself is very straightforward: simply turn into wind, keep the glider's heading as straight as you can, adjust pitch attitude to minimise the descent rate and fly back into the lift – see Fig (xi). Don't forget to make a clear 'going around' call as you fly back into lift.

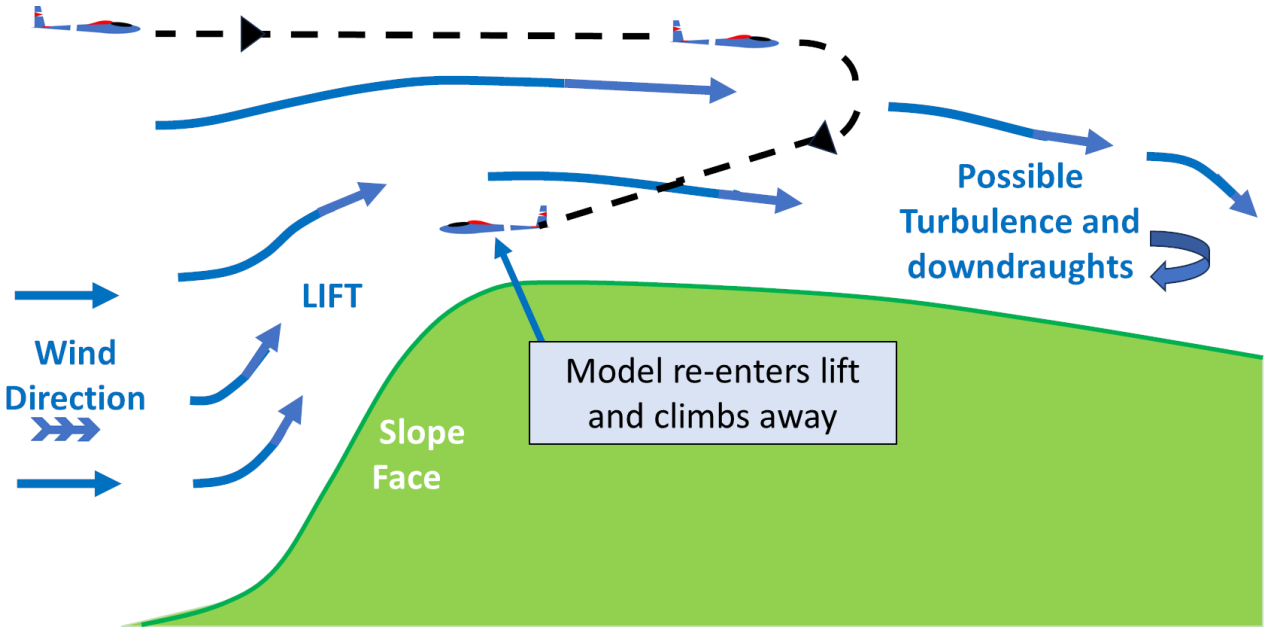


Fig (viii) High Approach to a Go-Around

Common Approach Pattern Errors. Clearly, there are numerous possible errors that you can make during a slope soaring session, and most of them are common to all RC disciplines. However, in my experience, there are three common errors that have specific implications for slope landing approaches. These are as follows:

1. **Allowing the Nose to Rise During the Final Turn**. As the glider's groundspeed increases on the downwind leg, it gains inertia. Some of this inertia will be retained by the glider as it turns into wind, increasing its airspeed - and therefore lift. This results in a very marked tendency for the nose to pitch up at the end of the turn onto final, which can lead to unwanted height gain. If this happens, there is a good chance that you will be too high to make a landing, so a go-around is probably the best option.

2. **Raising the Nose on the Downwind Leg.** As it turns downwind, the glider's groundspeed increases - as already mentioned. This is common to all RC aircraft; however, slope-soaring tends carried out in windier conditions, so the effect is often much more marked. This leads to a tendency for beginners to raise the nose to reduce speed, resulting in a climb and possibly a stall. If you make this error, lower the nose to avoid the stall - and don't hesitate to turn into-wind and go-around. If you do stall, carry out a recovery. If you have sufficient height, turn into wind and go-around: if not, you will be forced to land out of the landing area. On the approach, use pitch (ie elevator) to reduce speed as much as you can without stalling, adjust heading if necessary to avoid people, animals, property and obstructions (in that order), and land 'in the rough'.

3. **Allowing the Glider to Fly too far Downwind.** The glider's increased groundspeed on the downwind leg means that it covers distance more quickly. If it is not turned onto the base leg/final turn soon enough, there is a risk that it will fly into down-draughting and turbulence. This will make it more difficult to control. As the distance between the flyer and the model increases, orientation becomes harder, and there is a real risk of losing the model as it is blown further away. If you find yourself flying too far downwind, turn into wind as soon as you can. There is little chance of carrying out a go-around so, once again, you'll almost certainly be forced to land out of the landing area as in (2).

Chris Foss Phase 6

That's it for the Basics! Once you're confident with flying from the slope, it's worth moving on to a more capable model as soon as you can. The classic 'improver's' model is the Chris Foss Phase 6; while it doesn't have spoilers or crow-braking, it does have excellent flying characteristics and it's great for learning and perfecting aerobatics.

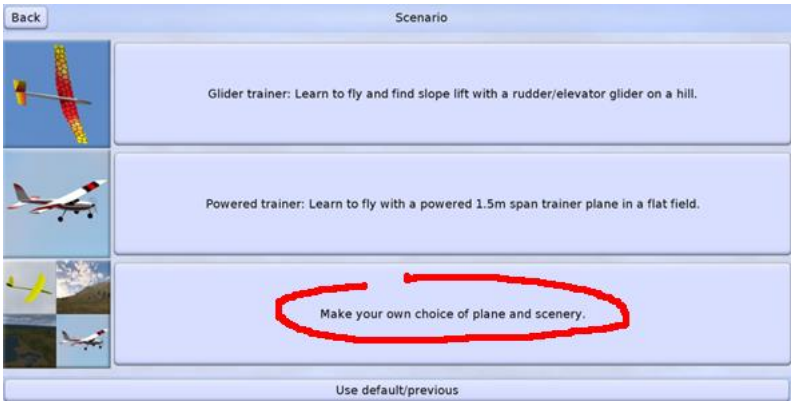
My own 'next step' model was a Keith Humber 'Kema 90', which is a plan-built alternative to a Phase 6 (available on Outerzone). It's 25 years old and I still fly now; in fact, I haven't moved on from it. Compared with modern high-performance (and high cost!) carbon fibre models, traditionally-built models like the Phase 6 and Kema 90 can seem a little staid, but it depends upon what you want from your flying. Speed, gentle duration, aerobatics or scale: the choice is entirely yours. PSS is certainly an attractive option for many flyers, and there is an association devoted to this discipline (PSSA). Scale or semi-scale jets and warbirds make good slope soarers, and often all that's needed is an old scale model with its motor removed and replaced with a nose weight. Arguably, one of the best uses for an old 600 can motor is nose ballast for a PSS model. Scale gliders are very popular; the constant lift provided by the slope means that attention to weight and drag is less important than it is with a thermal glider, which means that it's easier to incorporate detail and structure. There are some truly superb scale glider kits available, and it is a pleasure to see them in the air.

Using an RC Simulator for Slope Training

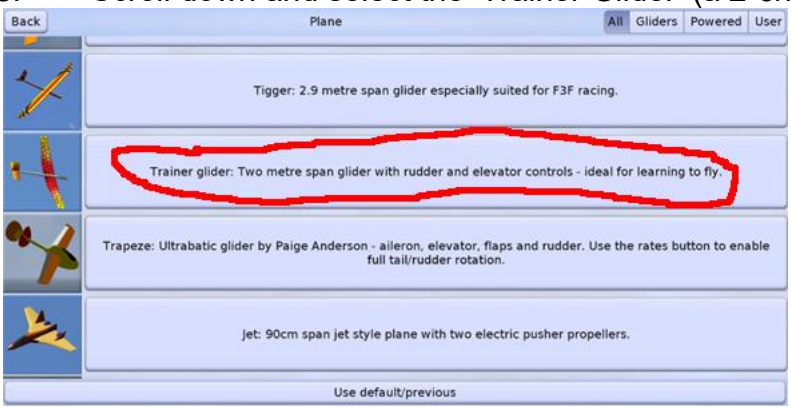
Finally, a word about RC simulation, which is an excellent way to prepare for slope flying. In some ways, it works better for slope soaring than it does for flat-field flying because it's easier to keep terrain in view. I use a number of RC simulators but, for me, the most realistic one by some margin, in terms of slope soaring flight dynamics, is Picasim. You can practise all of the techniques that I've outlined in this article – and make the common errors - without risk. This is how I recommend that you set it up:

1. Open Picasim and select 'Free-Fly'.

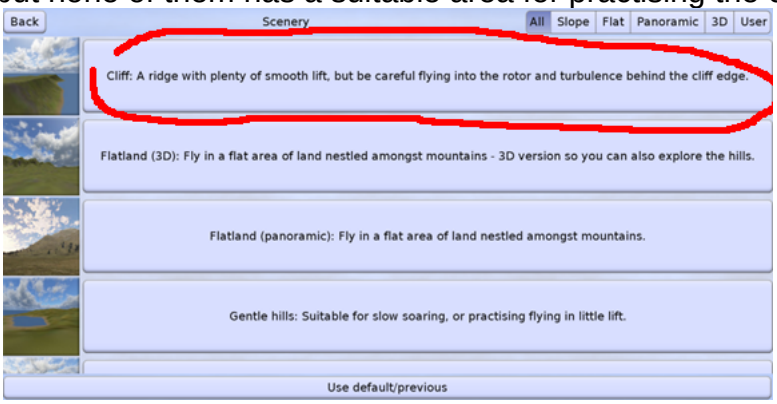
2. Select 'Make your own choice of plane and scenery'.



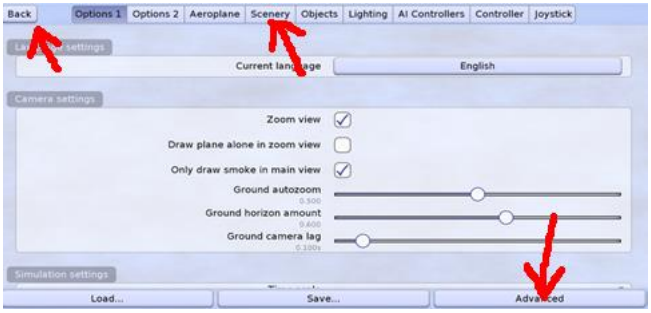
3. Scroll down and select the ‘Trainer Glider’ (a 2-channel rudder-elevator model).



4. Select the ‘Cliff scenery, and allow the simulation to load. The Cliff scenery is not photorealistic, but that doesn’t matter; the gusty wind sound effects give it a surprisingly convincing feel of a coastal cliff site. There are photorealistic slope soaring scenery options, but none of them has a suitable area for practising the classic approach and landing pattern.



5. Select ‘Settings’ (The cogwheel shape at the top). Select ‘Scenery’, then select ‘Advanced’ (bottom right of the screen). Adjust **all** the turbulence settings to about 0.2, and the rotor tendency setting to zero. You can increase these again once you are familiar with the techniques. I’d still be inclined to keep the rotor tendency at or near zero though; I’ve never encountered it to that degree over a landing area.



6. Press ‘Save..’ and save the setting as ‘Low Turbulence Cliff’ or something similar. Press ‘OK’, then ‘Back’ (top left). Now you’re ready to fly.

You’ll find your saved scenery file on the ‘Scenery’ selection page at the bottom of the list.

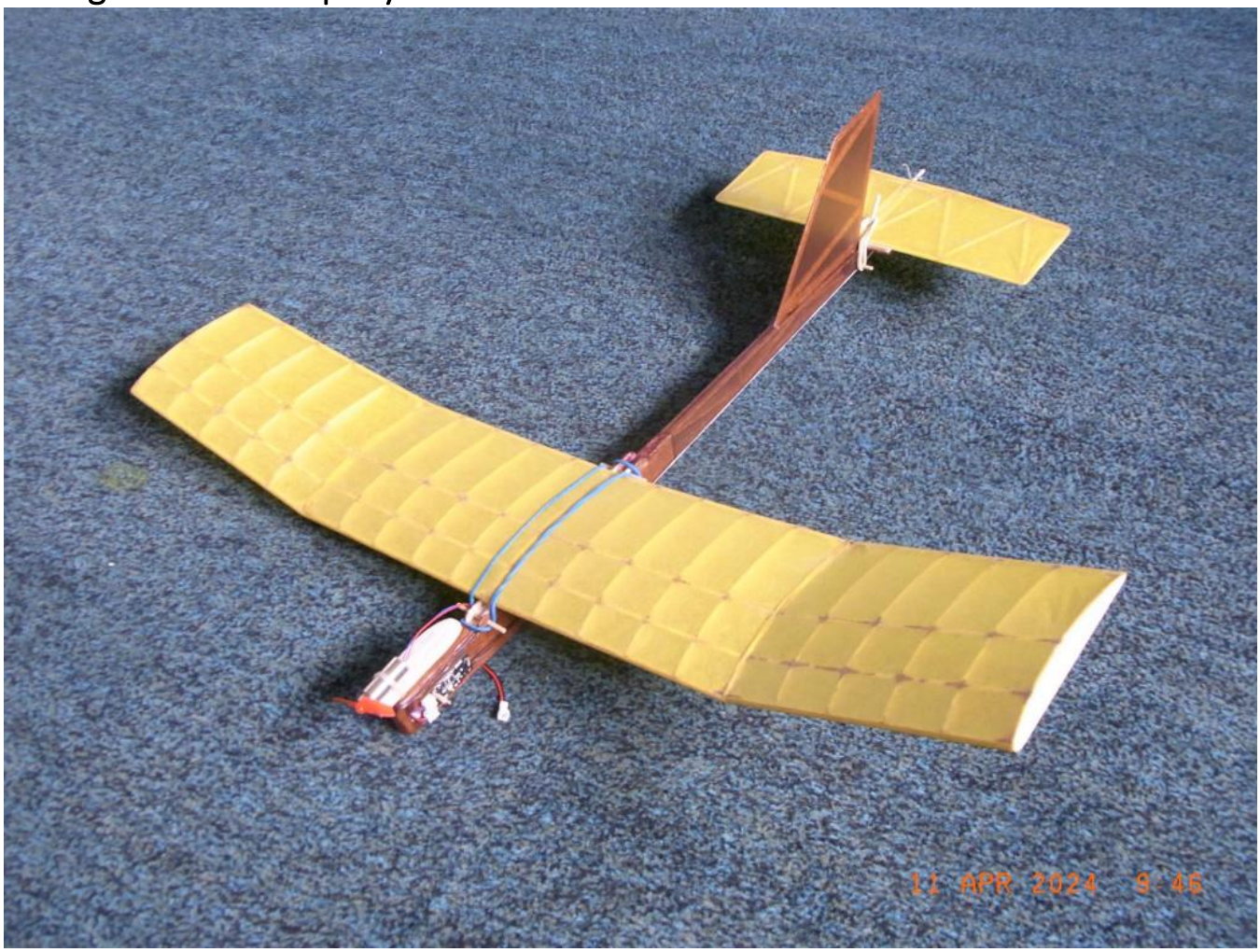
You’ll need to make sure that your TX rates and exponential are suitably set to get the best out of the simulation. The Glider Trainer model is excellent for starting out, but I recommend changing it for the Phase 6 as soon as you are confident to so; in my opinion, it’s the best model in Picasim, and on low rates it’s surprisingly docile.

Slope Soaring – Give it a Try!

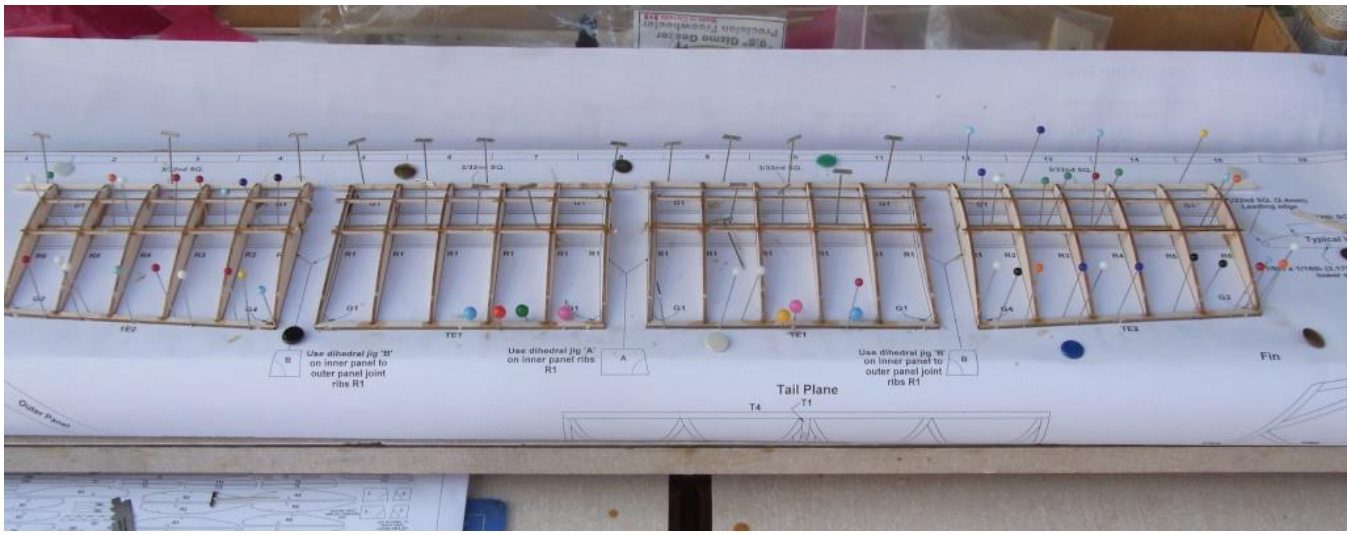
Uffington White Horse Slope Site

I hope that this article has whetted your appetite to try slope soaring and given you some understanding of the basic techniques. If you have never tried it, you’re missing out on one of the most rewarding model flying disciplines. As an added bonus, slope soaring helps flyers to gain confidence with flying in windy and turbulent conditions; this effectively increases the number of flyable at their regular site. In my experience, slope flyers are so much more relaxed about flying in windy conditions at the Meadow. Of course, slope soaring has its drawbacks, but so does every aspect of model flying. In my opinion, the rewards are well worth the effort. With Picasim, you can try it in your living room first, but it can’t compare with the real thing.

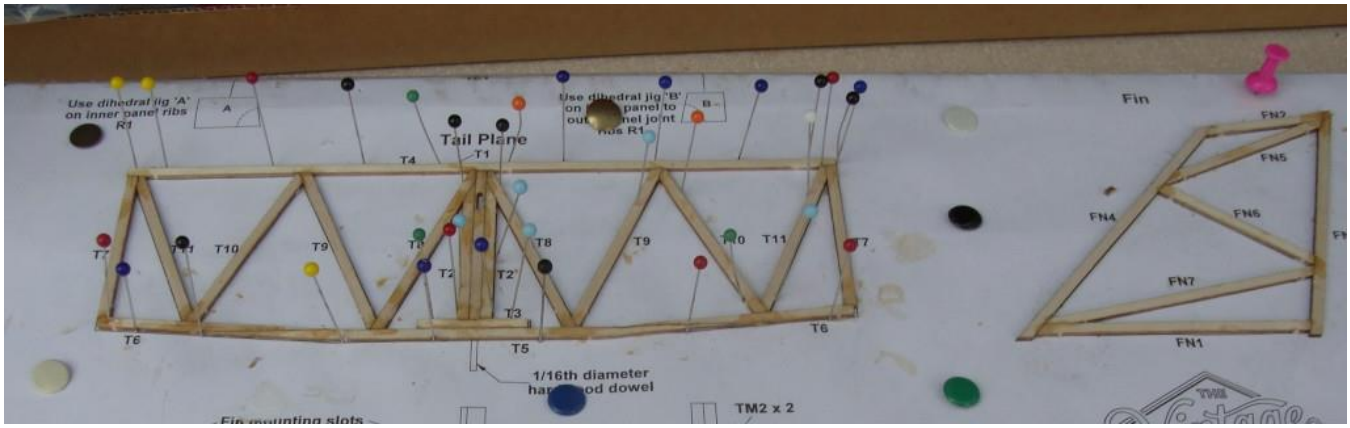
Vintage Model Company E20 Kit – Alan Trinder



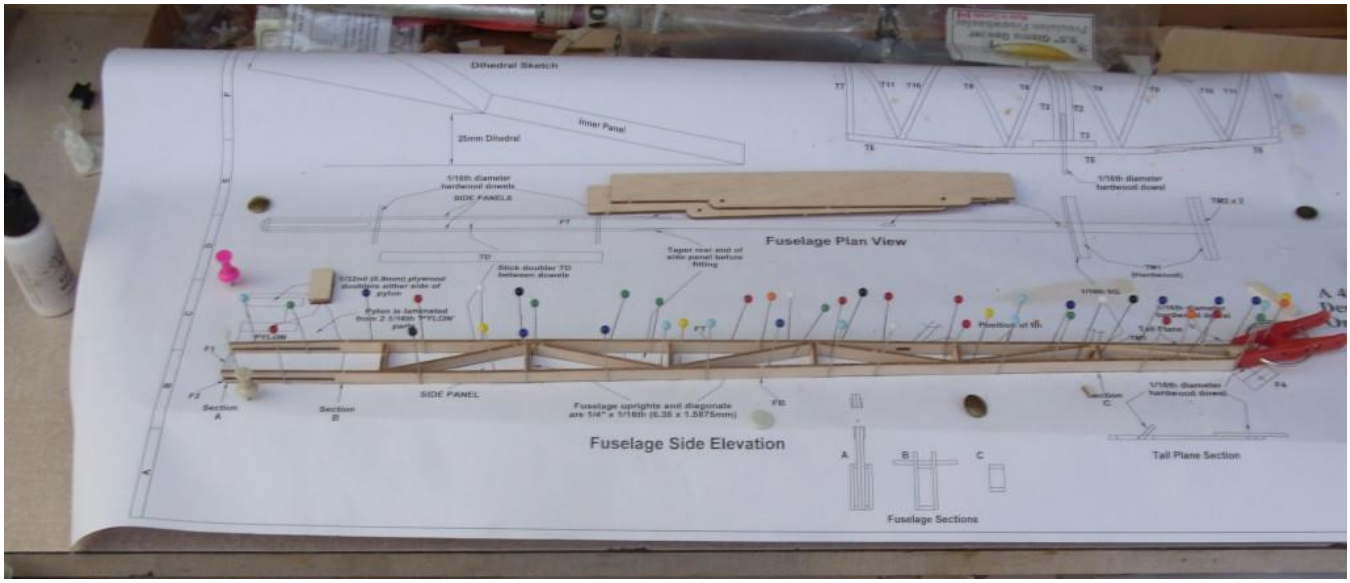
The contents of kit up to usual good standard but, interestingly, no strip wood was supplied – only laser-cut sheets of strip.



Wing construction was straight forward. A Clark Y 9% section is used so the ribs are flat to board.



The tail and fin also straight forward but see later.



However, the fuselage needed some thought – quite a lot actually. Having never constructed a built-up stick fuselage before I was grateful for Stuart Marsden's article about the kit in November 2023 Aeromodeller. It all went together O.K eventually and the basic framework completed in the end with no major problems.

When setting wing dihedral I used less than the original as Stuart also mentioned he had. The original just didn't look right and seemed excessive. First trimming flights will show whether the modification was a mistake. When it came to covering the elevator and fin, I found it difficult to avoid warps, I had two goes at covering fin but without an acceptable result, and eventually built a second framework using my own wood. I think VMC are trying to be too helpful in proving laser shaped cut out strips for both the elevator and fin framework, and I suspect I may even end up building a second elevator framework.

Fitting motor and DT to the fuselage took as long as building the rest of the model. I followed Stuart's idea for motor fitting as I couldn't think of anything better and even ordered a box of O rings as he suggested as “they're only a fiver”. Mine cost nearer £7 and I was somewhat surprised at what turned up:

At least I'll never have a problem should I need an O ring of any size. Ironically, I have ended up using dental bands (photo) for motor attachment which seem adequate and neater.

The power unit is the BMK set with band burner. I have yet to programme the timer/burner but, again, Stuart's guidance in Aeromodeller is very helpful. The C of G looks reasonable with battery in place and overall weight of model with motor is close to 1 ounce or 1.2 ounces with battery so it could be in with a chance of decent flights.

2024 Spring Duration Competitions and Fun-Fly – Chris Brainwood

The Competition [Chris Brainwood photo]

The Club's Spring competition was finally blessed with some nice weather after being postponed from April. The calm wind and beautiful warm May sunshine saw about 12 members enjoy the conditions with 5 classes run to cater for varied tastes.

The competition got under way at 9:30 sharp with the sound of Gary's authentic police whistle, though (luckily) we weren't invaded by the police eager to answer the call. The relaxed nature of the competition was very welcome thanks to the organising skills of CD Gary Law. The competitions were all best of three flights with members on hand to time each other and fill in the score sheets in the tent.

Chris Brainwood launches his Micro-X Piper Super Cruiser [Dave Monk photo]

P30

In the P30 class Bill Dennis's Teacher's Pet showed the consistency for 3 maxes, though retrieval became more and more of a hike as the wind speed increased. Andy Blackburn's Sweet P30 also covered some distance for its max, heading for the river, luckily it landed just few feet short saving him from an impromptu morning swim.

Andrew Longhurst's P30, now sadly Missing In Action [Chris Brainwood photo]

The wind steadily increased through the morning so by the time the competition had finished at around lunchtime we had a fairly steady 10 mph. The increase in wind speed caught out Andrew Longhurst too with his P30 disappearing over the river. It wasn't clear where it came down on its DT but unfortunately it may have ended up in the river. With that in mind some competitors elected not to fly the final rounds in case of fly-aways.

Name	Model	Flight 1	Flight 2	Flight 3	Total	Position
Bill Dennis	Teacher's Pet	90 max	90 max	90 max	270	1
Andy Blackburn	Sweet P30	86	82	90 max	258	2
Andrew Longhurst	O/D	90 max	90 max	-----	180	3
Jim Paton	O/D	40	59	-----	99	4

Kit Scale

In the Kit Scale class Andy Blackburn's Keil Kraft Stinson proved that small models can do well in the competition thanks to a bonus system intended to compensate the older and smaller designs.

Bill Dennis Launches his Earl Stahl Stinson O-49 [Chris Brainwood photo]

That said 51s is very good for the class though not quite a match in pure duration terms to Andrew Longhurst's much larger Comper Swift. Chris Brainwood was 3rd after bonuses with the Keil Kraft Piper Super Cruiser despite 4th place Bill Dennis's Earl Stahl Stinson 0-49 scoring double the flight total time *[The bonuses are being tuned to give bigger models more of a chance - Ed]*.

Name	Model	Flight 1	Flight 2	Flight 3	Total	Bonus	total	Pos.
Andy Blackburn	KK Stinson	51s	41s	46	138	55	193	1
Andrew Longhurst	Comper Swift	39	60 max	60 max	159	0	159	2
Chris Brainwood	KK Piper Super Cruise	20	16	26	62	65	127	3
Bill Dennis	Stinson O-49	57	41	26	124	0	124	4

Hi-Start Glider

The Hi-Start glider class was the most popular of the day with a Peterborough rules bungee provided for launching. The class sort of unofficially saw itself split into duration models and scale designs. On the day Alan Trinder's Keil Kraft Dolphin and Andrew Longhurst's Tops tied for 1st while Simon Roger's new and very nicely made Schweizer 2-22 from the Volare kit floated its way to 4th and best of the scale designs.

Simon Rogers' impressive Schweizer 2-22 [Chris Brainwood photo]

Later checking revealed an error in the max time calculations so in the final results, Alan Trinder wins the class. Having been trimming in calmer weather both myself and Gary Law found our models tended to come off the line a bit too soon and it's clear the pointy wingtips of the Airspeed Tern do not make for a good duration model. The slightest bit of turn and the model tends to drop a wing and lose height. Bill Dennis's new enlarged Earl Stahl Schweizer TG-2 was looking promising but the short-coupled tail was making it tricky to trim into a consistent performer

Name	Model	Flight 1	Flight 2	Flight 3	Total	Pos.
Alan Trinder	KK Dolphin	30	28	72	130	1
Andrew Longhurst	Tops	40	60 max	-----	100	2
Gary Law	CK DAB	40	20	39	99	3
Simon Rogers	Schweizer 2-22	21	25	36	82	4
Chris Brainwood	Airspeed Tern	22	17	26	65	5
Bill Dennis	Schweizer TG-2	24	14	20	58	6

FROG Senior

Gary Law winds his winning FROG Senior Redwing [Chris Brainwood photo]

Gary Law won the FROG Senior and proves that it's always worth getting 3 timed flights. The class was a fight between the Gary's Redwing and the Linnet of Andy Blackburn but the increasing wind speed and lack of DT on the Linnet meant Andy only flew 2 rounds which saw the Redwing take the victory with its 3 flights by just 3 secs. Simon Rogers' Linnet was going well too but only put in a time for the first round.

Name	Model	Flight 1	Flight 2	Flight 3	total	Pos.
Gary Law	Redwing	22	34	49	105	1
Andy Blackburn	Linnet	57	46	—	103	2
Simon Rogers	Linnet	28	—	—	28	3

Meadow Flyer Summer 2024

E20

In the E20 class Alan Trinder was the winner with a fantastic first flight to gain a max by some margin. Gary Law's model couldn't quite match that but with some consistent flights got within 10s of Alan's total. Both models were from the VMC kit

Name	Flight 1	Flight 2	Flight 3	Total	Pos.
Alan Trinder	60 Max	12	15	87	1
Gary Law	19	28	30	77	2

It was a very enjoyable meeting with some members coming along to enjoy some fun flying and trimming as well. Dave Monk brought along some lovely diesel vintage models which added a difference and very welcome sound and smell to event.

By 1pm the event was drawing to a close with the awards with a few braver souls staying on to do some more flying in windier conditions.

Club And Other Local events, 2024

OFMAC

2023-2024 Season Dates

Indoor Model Flying

Funfly for all. Freeflight, Rubber, CO2, Electric

Venue:
Henley Leisure Centre
Gillotts Lane
Henley-on-Thames
Oxfordshire
RG9 1PA

Dates:
Sundays 10:30 to 16:30
1st October 2023
5th November 2023
3rd December 2023
7th January 2024
4th February 2024
3rd March 2024
7th April 2024
5th May 2024
2nd June 2024

Contact:
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07545158177
ofmac@redkite.aero

Club Meetings at Begbroke

Wednesday 19 June 2024	Club Night: Fun flying on the Begbroke Field
Wednesday 17 July 2024	Club Night: Fun flying on the Begbroke Field
Wednesday 21 August 2024	Club Night: Fun flying on the Begbroke Field
Wednesday 18 September 2024	Club Night: 'Cartoon Foamie Warbirds' introduction, demo and kits collection
Wednesday 16 October 2024	Club Night: Mini talks by club members
Wednesday 20 November	Club Night: AGM
Wednesday 18 December	Club Night: Fish 'N' Chip supper + Quiz

Competitions on Port Meadow for 2024

Definitions:

The "Peterborough" bungee = 7.5m of 1/8 rubber and 22.5m of line.
TOTF = Total of Three Flights + Fly-off if required

Midsummer Scale (open to BMFA members) + Fun-Fly (Saturday 13 July)
Scale Glider: TOTF duration, launched by 30m (Peterborough) Hi-Start bungee. No static judging.
Rubber Scale Duration: Simple TOTF duration competition for rubber scale models + bonuses, no flight or static judging. Kit and Open classes.
Flying Only: IC/CO2/Electric/rubber, Flying Only rules (judged flight, no static judging).

MIMLOCT Cloud Tramp & Fun Fly + RC Assist Glider + Fun-Fly (Saturday 3 August)
A fun-fly afternoon on the meadow with Cloud Tramp mass launch @ 5.00 PM followed by the Hi-Start RC Assist FF Glider competition (KK Dolphins), 5.30 to 7.00.

Autumn Duration + Fun-Fly (Saturday 14 September)
Vintage & Classic Glider: Two classes (55" Span Open and A1) for kits and designs first published pre-1961, launched by either 50 m Hi-Start bungee or towline. Re-issued kits (e.g. Spencer Willis Aiglet A1, Ripmax KK Caprice & Invader) are allowed. TOTF.
Coupe D'Hiver: Standard coupe - 70g empty, 10g motor, TOTF.
Vintage & Classic British Rubber Kit Revival: British rubber kits pre-1961, maximum span 36" (measured with a tape measure), also open to one-off (un-kitted) prototypes produced by a British kit manufacturer, and reissued Ripmax/KK kits. TOTF.
Catapult Glider (e.g. Oxcat): max 2 gm rubber (e.g. 12" x 1/8") on a 6" max handle., 9 flights, best **6** to count.
Rubber Scale Duration: Simple TOTF duration competition for rubber scale models + bonuses, no flight or static judging. Kit and Open classes.

The **2024 Under 25" Vintage Cabin Postal Competition** will be run in three Rounds.
Round 1 (Spring) runs from 1st May to 30th June.
Round 2 (Summer) runs from 1st July to 31st August.
Round 3 (Autumn) runs from 1st September to 31st October.
For full details see the Club website https://oxfordmfc.bmfa.uk/2022-under-25-vintage-rubber-postal/. In case of questions/issues, the Virtual CD is Andy Blackburn.

Contributions to the Newsletter

We're always looking for contributions to the newsletter and almost anything relating to aeromodelling will be most welcome. Please let me have your contributions by the last week in August for inclusion in the Autumn 2024 newsletter. Send them to: Andy Blackburn at *newsletter@oxfordmfc.bmfa.uk.*

If submitting lots of photographs (which we all enjoy) it's best to send the files separately, using www.wetransfer.com. However, anything less than 20 MB is usually OK on email.

Tailpiece

Some of us went flying in late April, the going was quite soft but most of the meadow had dried out. Unfortunately, Bill Dinnis' Earl Stahl Stinson O-49 managed to land in the one tiny area of the meadow that was still under water! Trish Dennis is seen here wondering whether a retrieval can be attempted without getting stuck in the mud [Photo – Bill Dennis]