



# NEW Clarion

## SAM 1066 Newsletter

*Merry Christmas*

Issue  
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December  
2020

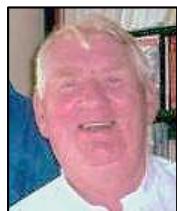
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**I Pad users:** If you are having trouble opening the New Clarion, hold your finger on it to display a menu, then select "open in new tab". You will find the new tab to the right of the SAM1066 tab.



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## Editorial

Ah well!!!, lockdown again, does not make a lot of difference for me as I'm pretty inactive at the best of times, I suppose most of you are tearing your hair out by now, not that a lot of you vintagents have much, but I still do.

Without any modelling meeting activity in the near future, copy for our magazine is going to be a bit sparse. This where I launch another appeal for articles on any subject you like, without your input the magazine will consist of old reprints and whatever I can think of. Memory lane is a source for subject matter so put your thinking caps on and come up with something, **Please**. Pictures and/or articles of winter builds are another possibility.

This issue we start off a report on one of the BMFA 7<sup>th</sup> Area events, namely Beaulieu reported by our chairperson Tony Shepherd. I visited the old airfield once, it has vast areas of gorse interspersed with clearings and the old runways. I'm baffled as to how the regulars know where to fly from to land in suitable places for recovery, but they do. It is a pleasant place to be on a nice summers day amongst the ever present ponies, model flying is a bonus.

I've purloined a couple of bits of Pylonius for this xmas issue, the extra one being from the 1996 December issue of Aeromodeller.

As I promised last issue there is a couple of pages with the excess pictures from coupe Europa reports. I've listed the source photographers but due to duff housekeeping I cannot attribute pictures to picture takers. My apologies to the photographers.

My contributions this issue are, first another of my historic pieces from the old paper back Clarion of David Baker's days, followed up with a memory lane piece on models I have lost. Thinking back on models of the past, the only ones that I seem to able to recall the fate of are the lost ones. There are many many models I recall flying, right back to all sheet own design jobs in my control-line beginnings, but no recollection of their fate. My first engine, an ED Bee, did sterling service but where it went I have no idea. So much for good memories.

In search of xmas fare I have extracted a canard version of the 'Ebenezer' by Jim Fullerton from Aeromodeller December 1966. I am not sure if anyone might be tempted to build one. The little tiny Cox .010 might be a stumbling block. It might be a better idea to upscale the model to .5cc or even .049.

Nick Peppiatt has deviated from his norm to get us back to basics with a full description of carving a balsa propeller. I have carved one or two in the past but my results are a bit grim. If I need a prop these days I contact Spencer Willis and he will supply a masterpiece at a modest cost. Beautiful wood, glass coated with bamboo edged blades. I have one absolute beauty for my Jaguar awaiting fitting after the next breakage of the much repaired prop currently fitted.

I came across an aerofoil article so I've slipped in a sheet of some of the standard types that we use. Point of note, someone, whom I do not recall, told me that the upper profile of the old faithful RAF 32 is good for indoor model wing ribs.

A Tatton Park Timperley report by Gerry Ferer is probably the last on competition activities for the foreseeable future. I cannot see the covid situation review on Dec 3<sup>rd</sup> being helpful.

Our Archivist Roy Tiller provides yet more snippets from some of the lesser known magazines on aeromodelling subjects. He must do a lot of bedtime reading.

Finally our secretary Roger Newman wraps up this year with his notes and his plan selection for the Models of the Month.

Editor



### 7th Area Meeting at Beautiful Beaulieu

The forecast of winds from the North at 10mph gusting up to around 20mph were only right from the point of view of the direction and it actually turned out to be a rather nice day for the final Area Meeting of this much reduced year at Beaulieu.

Just five of the regulars made the trip to fly in the comp classes, whilst Roger Newman took control, David Etherton trimmed and John Coxall spectated.

Roy Vaughn and David Cox had a go at SLOP.

Dave managed a couple of maxes but unfortunately dropped his middle flight however this was still quite an achievement given that one of his knees is probably going to have surgery on it and his walking is very painful - the result of a fall whilst trimming earlier in the year.

Roy had much less success when his model piled in on its first flight. He was going to save the day by using the visit for some F1J trimming but the complicated bits weren't working properly so he spent rest of the day timing for the other flyers.



Dave Cox readies his SLOP model  
whilst timekeeper, Roy Vaughn, watches having lent Dave his starting gear!

Peter Hall flew a Buckeridge Rubber job in Mini Vintage but his "No mistakes" culture deserted him. He made a max on the first flight despite a dreadful flight pattern, but flight No2 saw the model pile in very early on, breaking the prop and that was his day over.

Ray Elliott flew his electrified Tom Smith "Nig Nog" in Combined Electric. Despite persisting with a flight pattern that saw the model turn left at the top of the climb and roll over on its back prior to stalling down for much of the glide, he still managed two maxes and a 2' 14" (which subsequently turned out to have won him the class).

With his comp flights complete he made a minor trim change which sorted out everything - let's hope it stays like that over the winter!



Peter Hall Winding for his second mini vintage flight which piled in



Ray Elliott and electric Nig Nog waiting for the air



Tony Shepherd's E30 Fly-Off launch

In E30 Tony Shepherd was Crookham's representative. Three maxes were achieved, one very comfortable and two a bit close for comfort but they still managed it. Fly off time provided the best weather of the day and a launch into a lull combined with a small but noticeable temperature jump saw Tony's best climb of the day. This was followed by a super glide with the little model continuing to climb. The breeze took it on its way until it went OOS at 4' 06" - fortunately a 4'30" DT had been set and the model was heard down safely by the loss of the signal from the tracker. The retrieve was proceeding well until the signal was suddenly lost but a text message was subsequently received from a couple who'd been out walking and picked up the model and taken it back to their house a couple of miles from the airfield so collection was arranged for the journey home. It turned out that the lady's father used to be a model flyer in Minnesota in the 1950's.

And that was the end of the 2020 competition season at Beaulieu.

Tony Shepherd



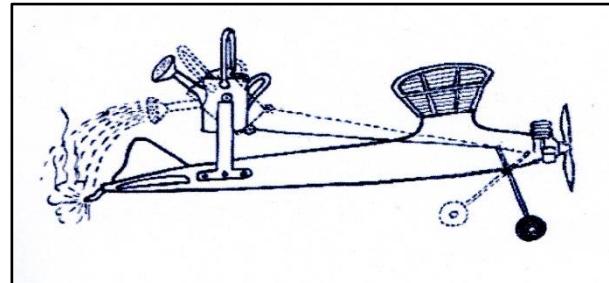
Extracts from Model Aircraft May 1952

### Burnt Offering

Most laymen, I suppose, associate the term "D.T." with the palsied after-effects of a "lost weekend." To us aeromodellers, however, the term has a more pleasant significance; denoting, as it does, an agreeable decline in the weekend losses of models. For this happy state of affairs our thanks are due to that anonymous but time-honoured genius who first tried dabbing a little, saltpetre on the tail of his wayward model. Little did he perhaps realise at the time that his simple idea would spread like wildfire throughout the aeromodelling world; leaving in its devastated wake acre upon acre of burned up crops and blackened grass-land. Trouble is, though, that the farming types are selfish enough to resent the odd acre being offered up as a propitiatory sacrifice to the Great God Thermal. An attitude which is evident even in bountiful America, where the incendiary model is now regarded with much the same hostility that the early American settler felt towards the flaming arrow of the barbarous Indian. Although it might be mentioned in passing that more than one fuse-happy American mod, awaking with guilty dread the dire consequences of destroying a largesorne quota of the world's food supply, has been startled to receive a handsome gratuity from some enriched stockbroker.

To the average modeller who, in the high fever of his building activities, is wont to subsist on a spartan diet of tea and balsa dust, the ravaging of a few acres of ripening corn is regarded as nothing more than a mild form of protest at the utilising of such good flyable territory for the growing of such hideous fungus. To the gastronomic needs of lesser mortals he is, of course supremely indifferent.

Happily, this indifference does not extend to the brains of the aeromodelling world. I have been working for some time on a safety device to ensure against the further destruction of crops by fire-brand models and yet at the same time to retain the benefits of the now essential "D/T". The fruits of my inventive genius can be readily perceived in the brilliant idea illustrated.



### How to Watch No. a. Team Racing

It has often been said that the chief attraction of team-racing lies in its strong spectator appeal. To what extent it appeals to the weak spectator I don't know, but it does provide a lavish entertainment for the casual observer.

Now, in making your debut in the team race gallery you will naturally be wasting your time if you can't trot forth the occasional sage comment—as one who knows his onions should. And hardly will you be able to stagger the other galleryites with your intimate knowledge of the sport, if, like the majority of spectators and most of the participants, you haven't the proverbial clue.

First of all it must be borne in mind that in team racing there are many unusual features which are likely to perplex the "L" watcher. Perhaps, you may be inclined to think that the similarity in appearance of the models strikes a somewhat monotonous note. But don't be deceived. A closer scrutiny of these ingenious little machines will reveal many novel and interesting variations in design, such as a boldly painted pair of moustaches on a dummy pilot, or a curvaceous cutie lying recumbent on a wing panel. Or, again, you may be puzzled by the presence in each of the models of a quaint looking dummy pilot, who, in his 1918 Flying Corps rig, seems to gaze with such apoplectic disapproval on all the new-fangled modern flying contraptions. Well, the compulsory installation of these dummy pilots is one of the few simple rules governing the sport, and is fully explained in "Team Race Rules" Vol. 7, Chap. 24, Para. 60.

Another advantage of getting to know your subject is that you will avoid the sort of dreadful misunderstanding such as befell a certain moth-hunting professor.

He had been following a farm tractor for some miles—looking for caterpillar tracks—when he found he had wandered into an airfield where a team race was in full spate. The elaborate ceremony which greeted the professorial blinkers so amazed him that, after watching the war dance antics of the handle wavers, the stick-jugglings of the lap counters, and the display of hookah-puffing on the part of the pit mechs., he immediately repaired to his study to write a long and learned thesis on "Tribal Rituals in a Mechanised Age".

Another misleading aspect of team racing is the impression that all the hectic scrambling and dashing about is an exhausting business, fit only for the young and vigorous. This is far from the truth. Team racing afflicts even the most elderly—witness the recent publicity given in this journal to the astonishing feat of "40 laps at 90" (Wilfred Pickles please copy).

Having mastered the intricacies of team racing you will find it a never ending source of interest and amusement—that is when you get tired of watching aeromodelling.

*Pylonius*

## Croydon Coupe Day Pictorial



Chris Chapman

Martin Stagg



Chris Chapman winding for the Fly-Off



Chris Chapman



A.N. Other



Chris Chapman again



Roy Vaughn waits with Dave Etherton on the watch



Martin & Mrs. Stagg



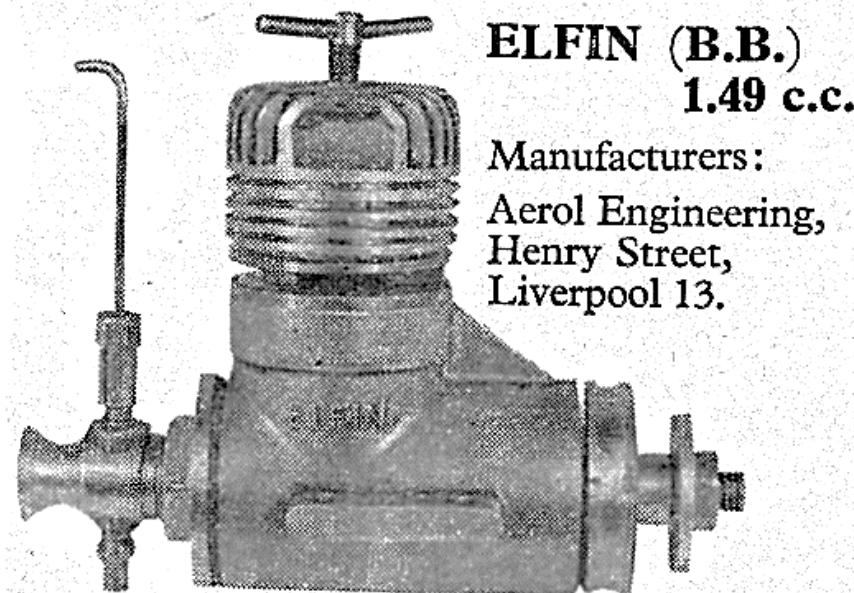
Gavin Manion launches with Dave Etherton timing, Roy Vaughn looks on and Martin Dilly fights the streamer



Gavin Manion winds & Dusan Jincny checks Photographer



Alan Brocklehurst takes a break



**ELFIN (B.B.)  
1.49 c.c.**

Manufacturers:  
Aerol Engineering,  
Henry Street,  
Liverpool 13.

Retail price 91/- (including tax)

Displacement: 1.49 c.c. (.091 cu. in.)

Bore: 0.503

Stroke: 0.460

Bore/stroke ratio:

1.075

Bare weight: 4 oz.

Max. B.H.P.: .158 at  
13,600 r.p.m.

Max. torque: 14.3  
oz.-in. at 7,500 r.p.m.

Power rating: .105

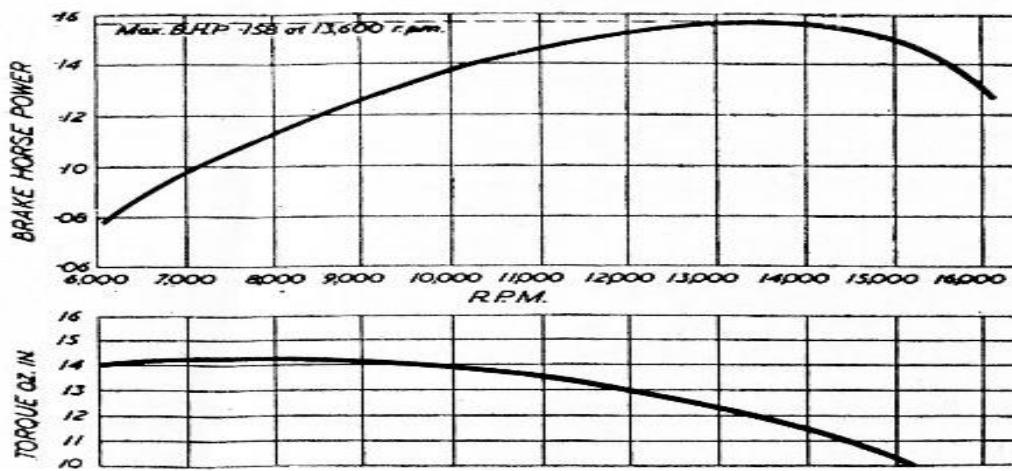
B.H.P. per c.c.

Power/weight ratio:

.04 B.P.H. per oz

PROPELLER	R.P.M.
dia. pitch	
8 x 6 (Stant)	8,000
7 x 6 (Stant)	11,800
6 x 4 (Stant)	13,700
6 x 9 (Stant)	15,200
8 x 4 (Stant)	11,000
8 x 6 (K-K)	9,300
7 x 6 (K-K)	10,750
8 x 6 (Trucut)	8,250

Fuel: Allbon diesel fue 1



## LOCK-DOWN REGULATIONS

The present regulations restrict travelling outside the designated lockdown Tier. Tatton Park is in Tier-2. Most of our members live in greater Manchester which is Tier-3, and should not travel out of their area. Derick May who lives inside Wales is also prohibited. Mike Macconnell is the exception, living at Cranage in Tier-2, and may travel there. **So at present we are unable to have flying meetings in the Park.** Let's hope this situation does not last too long.

BMFA give the lockdown rules at [www.bmfa.org/news/news-page/articleID/2692](http://www.bmfa.org/news/news-page/articleID/2692)

An extract for Tier-3 is below

## NEWS

**Midland Gala.** Due to extreme weather on the scheduled Saturday 24 October at Barkston, the meeting was postponed to Sunday 22<sup>nd</sup> November. Barkston is Tier-1. Classes are ---F1H, F1G, BMFA-½A, E36, P30, CO2, Mini-Vintage, HLG/CLG, +Cranfield-Classic Power.

**Free-Flight Forum.** This annual Symposium on modelling matters this year will be a Zoom meeting on Sunday 15<sup>th</sup> November at 10am.

Details and how to register are at [www.freeflight.bmfa.org/2020-forum](http://www.freeflight.bmfa.org/2020-forum).

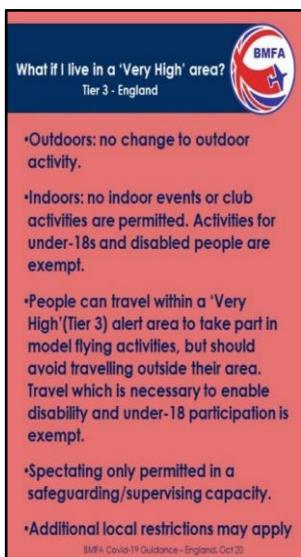
The charge is £5.

## REPORT---For the Don Fletcher Max 3x Span event at Tatton on 15th October.

With a forecast NE wind we walked along the path past the Old Hall setting up before the small trees. The drift varied from north to east at first, some flights going straight to the deadly Old-Hall trees. Later the wind increased to the forecast 8mph NE.

Warm in the sun at 11deg.

DON FLETCHER (max =3x span) 15 Oct 2020								
Name	Model	Span	Max	1	2	3	Total	Total %
Mike Macconnell	Thermal Bug	30	1.30	1.38max	1.40max	1.28	4.28	298
Gerry Ferer	Senator	31	1.33	1.48max	1.29	1.20	4.22	282
Ralph Sparrow	Achilles	24	1.12	1.25max	0.52	0.50	2.54	242
Roger Shaw	P30+	30	1.30	0.45	0.51	0.50	2.26	162



BMFA lockdown rules.

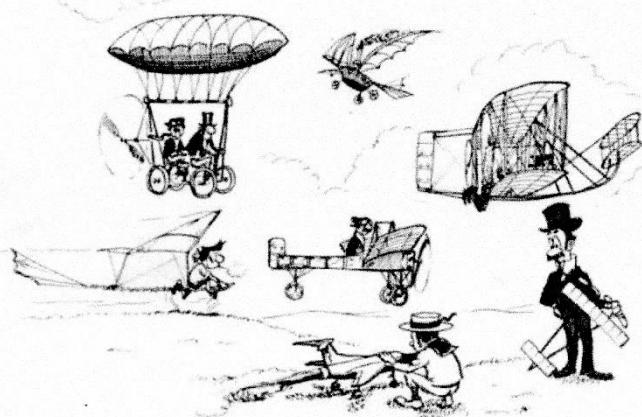


Ralph's Achilles

Roger's P30 with extra rubber

Gerry Ferer

Extract from Aeromodeller Christmas edition 1966



Ye olde tymes recalled by 'Pylonius  
with ye engravings  
and graphically illustrated  
of a "Sherry"



# Reminiscences

## Chapter the First

(In which I encounter a coachman with a touch of d/t's; meet an eminent aeronautical gentleman who shows me a man carrying aeroplane (must be jolly light for a man to carry.) and achieve an airborne state with the help of two giant footmen.)

My interest in flying began when the strange craft carrying Sir George Cayley's coachman landed with a great splintering of oaken bulkheads and wattle stringers in the Orangery.

"Be that drafted altimeter," he roared, "Ah told Sir George the bell rope was too dang heavy; though, come to think on it, t'weren't so much the bell rope as the dang bell on end of it."

I dusted the goose feathers off my hat and followed John Betjeman into the Italian Garden. Sir George was about to test his latest model. It measured full three footmen across the eccentric wing brace. Sir George and I took a few turns round the winding Pirelli.

"Look here, Sir George," I said at last, "Do you know you could make that model five pounds lighter by using new wonder elastic."

"Elastic," cried Sir George, "What a splendid idea!"

He then called over to a group of fifty

flunkeys who were standing around the neo-gothic control tower.

"Alright, men. Stop pumping and follow me."

Screams were heard coming from the West wing.

When I next saw Sir George he had a face as long as a kite.

"Why have you a face as long as a kite, Sir George?" I asked.

"Damn fool question," he boomed, "Can't you see I'm designing a man carrying machine."

"Had you a flapper in mind?" I asked innocently.

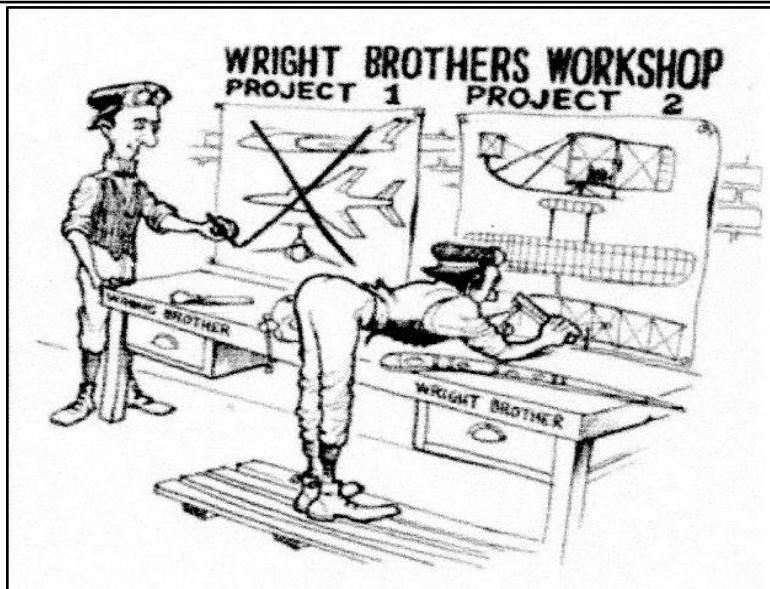
"I said a man carrying machine!" he roared, "Never mix work with wimmin, me lad. Now, out of me way, while I work out the power/weight ratio of one overfed, lazy, gourmless—

"broken legged—" I suggested.

"coachman."

"And Leonardo De Vinci to you, too!" I retorted.

# \*\*\*\*\* of a Vintage Flyer \*\*\*\*\*



## Chapter the Second

(In which I go to a distant land to meet two famous brothers. I see a strange feathery flying machine and many bald looking Indians.)

"So, you're the Wright Brothers," I exclaimed, "I always get you mixed up with those three singing sisters. But, of course, you wouldn't know that; you Americans don't follow football."

I then embarked upon a lengthy argument with them about flying tail first, suggesting it might cause some confusion upon landing after their epic flight across the Atlantic.

"That's Alcock and Brown," they cried.

"Well, you don't have to be rude about it," I replied, "Anyway, I've heard tell of a little Frenchman whose been flying around the Moulin Rouge, or one of those Froggy places."

"Toulouse-Lautrec?" they enquired.

"No, I think he got down in one piece," I answered. "Seems he uses some sort of steam engine."

"Rocket?" they queried.

"Give him a chance. It's only 1895 yet," I replied. "By the way, now you've built your plane why don't you take it up?"

"Don't be silly," they shouted, "Who's going to teach us to fly?"

## Chapter the Third

(I visit Gay Paree in search of a famous flyer. No one believes me.)

"Is that Bleriot?" I asked of the wayfarer, pointing to the strange contraption overhead.

"Be quite clear to me," he replied, "Must be your eyes. That be one of them new fangled pylons. Be lots of complaints from that there Montgolfier bloke."

"Wouldn't know about that," I said, "Don't play the game myself."

Anyway, I eventually tracked down Monsieur Bleriot to a field outside Paris. He was practising nose down landings on a piece of specially sown English grassland.

"Accepting that you're a Frenchman. Ooh-la-la and all that," I said, "Don't you think that, in the interests of our strong English morality you ought to keep your fuselage covered?"

"You zink I sits with my legs in ze draught for nuzzings, like some mad-mini skirted Eenglish mam'selle?" he demanded. "Eet ees zat crazee Van Gogh fellow. He keep, how you say, wheeping away the covering for his canvases, not to mention 'is ear'ole bandage."

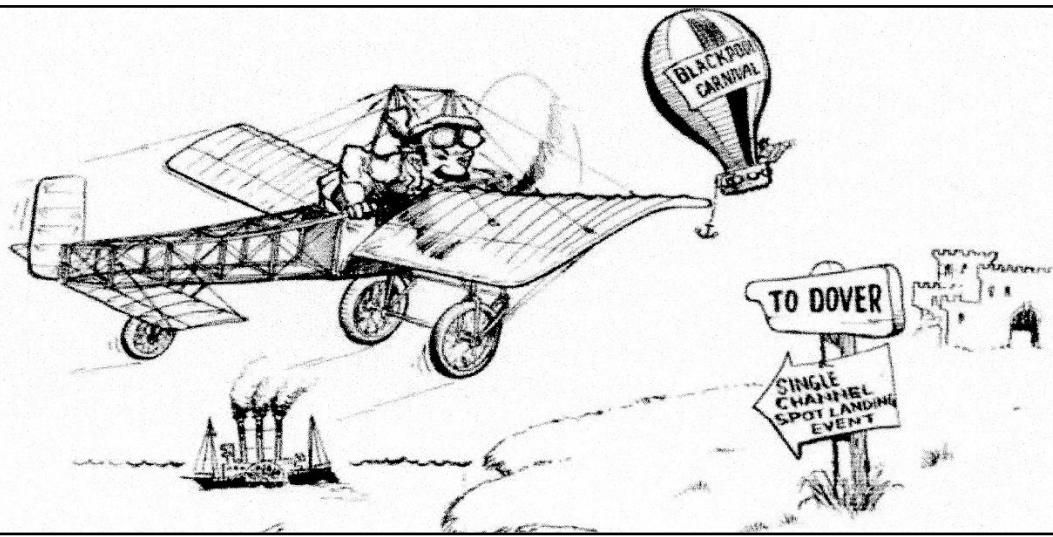
"But, look here," I asked, "Do you think it wise to undertake your projected flight using only Single Channel?"

"Ah, zee Eenglish sense of humour."

"You'd better get a move on," I suggested, "You can't expect that bloke to keep painting the Cliffs of Dover just for your benefit."

"But what about Graham-White?" he asked.

"No, just white," I replied.



## Chapter the Fourth

(In which I espy a craft seemingly to lack all visible means of propulsion. I investigate closer. I purchase a fine wig.)

"Can I see Frank Whittle?" I asked.  
"Yes, but see you don't tread the shavings all over the place," came the answer.

"Why does he whittle all day?" I enquired.  
"Between you and me," answered my informant, "He just can't get the hang of carving a decent propeller."  
"I get the same trouble myself," I admitted, "It's the helical."  
"I'll say it is. But did you want to see him about anything in particular?"

"I hear he's designing a propellerless engine. Using a turbine."

"Turbine?" he queried. "You must be thinking of Cadet Ran Singh."

At this I gave up and returned to the problem of winding up my A Frame Pusher. But where was I to find two girl friends?

Next week I visit the Sheikdom of El Rancid.

**The End**



Extract from the old paperback Clarion circa 2004

**John Andrews at Grantham & Luffenham**

Early in July I received a call from Peter Spalding inviting me to an open day and Bar-B-Q at the Grantham club's farmer's fields flying site. Wednesday 14<sup>th</sup> July and I was on my way, past Barkstone and down some country lanes and a farm track into a flying site similar in layout to Old Warden but somewhat larger. The field is a good trimming site and large enough for rallies of some sort or other.

I settled down near the Bar-b, I don't like to be too far away from food. It was more than a little breezy but I was there so I was going to fly. Before I assembled any models I visited the ever present John Hook and, after buying a fuel bottle, I finally remembered to get myself some thinners. I came away with a whiskey bottle full, some guys must have thought I was still on the meths.

I assembled my Stomper and prepared for a short trim flight. I had decided to attempt to straighten out the climb a bit and had fitted a couple of thin washers under the engine lugs to give a little left side thrust. I fired up the motor and launched with about a 4 second engine run. I had straightened out the climb alright, straight up into the wind and over the top. The motor cut when the model was upside down, but the model had just started to roll and I watched with ever tightening cheeks of my bottom as the descent and the roll carried on. Thankfully the roll just beat the descent and the Stomper was almost level when terra-firma arrived, no harm done apart from my blood pressure.

That was enough of that for me, out with the spanners, out with the washers and back to factory settings with the thrust-line. Next attempt, back to normal on the climb but the glide was all over the place and Stomper appeared to be pushed into the floor by some giant hand. The penny dropped, the field was bounded on the upwind side by a huge stand of trees and the very strong wind was boiling over the top creating phenomenal turbulence way down the field.

Stomper was back in the box in short order whilst still in one piece and I thought I would try my rubber model 36-4 which was supposed to be for windy weather. I put quite a few turns on to give enough power to clear the turbulence but not enough. Up goes 36-4, whips round the corner, wallows all over the place and is finally pushed into the ground. John boy does not give up though, more turns try again, same result only higher to start with. Still stubborn, I try even more turns, even higher but same result. This time the prop folded but, with no sign of a glide, 36-4 was pushed into the ground yet again. The balsa and bamboo cabane wing mount did not survive this time and most of it was removed by a wing down arrival on terra firma.

I gave it best and sat in the boot of the estate and cycled all the bits back together, then off to the bar-b-q. Great stuff, we even had a posh glass of wine to wash it all down, that's what aeromodelling should be like thinks I.

About now I noticed numerous chaps wandering about with Gaz Lanterns and packs of Gaz cylinders, it transpires that Rod Briggins was emptying out some closed down factory's abandoned stock. I missed the boat as usual.

Rod made a couple of attempts to fly his large open electric, but although he went off well down wind to launch, he still was hooked up with the turbulence and any thoughts of trimming soon vanished and he, Bert Whitehead and myself slipped into conversation mode. We moaned about the weather men's mistaken prediction of dropping winds later in the day.

As it was about 4 o'clock by this time and Rod had to go back down the A1 to London whilst I had to tangle with the A14, we both would hit the rush hour traffic so we decided to carry on chatting until the roads cleared a bit. What the three of us found to talk about for the best part of the next three hours I still don't remember but all of a sudden about 7 o'clock the wind died and it went dead still.

We had an hour of superb trimming conditions and I found I needed 1/16<sup>th</sup> packing under the tail to get 36-4 to glide again, no wonder it would not climb in the earlier wind. Finally, those of us who had hung on had a good time although we had had to wait until the death. John Hook was still there, flying one of his folding wing catapult gliders, John's gliders are available to all at about £2 a pop, at least they were when I bought my bundle for the grandchildren a couple of years ago.

My next three outings were to the delightful bomb site by the name of North Luffenham, the home of cratered runways and waist high grasses that not only hide models but modellers as well.

I was returning through the jungle after one check flight when I came across a clearing of beaten down grass containing non other than Ray Monks.



John Wingate winds his ITZME III Wakefield for his one and only flight at Luffenham

Ray was messing about with a power job and he informed me that he had just blown his folding prop assembly off the front of the motor and actually found all the bits. If you saw the depth of the grass, you would find that difficult to believe. Just look at the background of John Leitch's picture.

The three events, BMFA/Walsall Summer Mini, Brumfly Gala & Timperley Open, seem to have blurred together and I have difficulty in separating the individual happenings at each. One thing I do remember is the, BMFA 4<sup>th</sup> area do run by the Walsall club where your scribe recorded his first event win. I flew my Stomper in the additional British Power competition and, although I dropped one flight, my bad flight was better than the bad flights of the other contestants. John boy stepped up proudly at the prize presentation for his John Hook voucher.

My win was not without cost. I set up the Stomper and moved out into the grass for an engine warm-up and, in my usual bumble fisted manner, I managed to chew a lump off the end of my forefinger as I turned the model for tuning. Immediately following the bang, as my finger stopped the motor, came a chorus of 'Ouch!' from the majority of the nearby flyers. I get out the first aid kit and fiddle about trying to stem the blood flow whilst left-handedly getting a plaster on the wound. I was still leaking blood so I bound micro-pore tape around the whole shebang. After my first flight, I noticed my injured finger was feeling a little cold and looking very blue on the end. I had to unwind a few turns of tape to get the feeling back. Back at home that evening I unwrapped it and blood still flowed like Billy-oh so I re-wrapped it. Next morning same process, unwraps, blood, re-wrap. I then decided that a visit to casualty at the local hospital was the wisest move. Later that day I'm in the assessment sisters office, sat at her polished desk, and she asks me to remove the wrapping. Looking at the clean desk, I enquire "What about the blood?" Sister puts a wad of gauze on the end of the desk and I expose the wound. Dry as a bone, not a spot of blood in sight, just the white jagged edges of the cut. A couple of cross tapes with dressing and your embarrassed scribe scuttled away.

The same meeting saw my recent new acquaintance from Grantham, Rod Brigginshaw in the E30 electric fly-off, with me as timekeeper. The drift had veered by fly-off time and we moved to the end of the main runway as Rod intended to fly straight down it. I set myself up with a towel on the wet roof of the car to rest my elbows in case of a long flight and waited for Rod to launch. I had not seen any of Rods previous flights and only had my memories of his large model's test flights at Grantham.

His E30 could not have been any more dissimilar, when he launched, the model pottered across the runway towards me and went by me at shoulder height with me thinking, is it going to climb at all? Rod had said he expected to do about six minutes and when the model had completed its first circle, I could not see how. After the second circle, the model was a little higher and, as it carried on down wind, it was slowly getting a little more altitude with each successive circle.

After five minutes the model could not have been much over fifty foot high, then it came slowly down and I clocked it off at 6-17, Rod knows his model. The time was good enough to win, so we both had to step forward for awards at the end of proceedings.



*Vintage Power flyer John Leitch with his electrified recovery en-semble.*

I thought I'd throw in a picture of well-known John Leitch and his electric powered bicycle recovery machine. The box on the back will hold John's models for the trip back to base. John is a real vintage power man and all of his models fly with vintage engines. When I enquired as to what he had, he reeled off a very long string of models and engines that I could not possibly remember, McOys, Ohlsson etc. The list was more akin to an engine collection than a competition flyer, but a competition flyer he certainly is. He made the vintage fly-off at the first Luffenham do but declined to compete in the fly-off, as he just could not face another safari through the jungle grasses for recovery.

I failed to compete at the Timperley do and the Brumfly. My Stomper had a long burble at cut off so I had fixed up a strangler next to the spray bar operated by a lever from the normal squeeze off timer. Snag was, the lever seemed to slow down the action, and cut off was even worse so, when I tested at the Timperley, I opted out. Brumfly was just too windy.

#### *Subtitle – Giggles with Biggles*

I just could not resist the title, this a tale of recovery of John Coopers A1 glider (I don't go in for these F1-whatevers) and John Wingate's Wakefield by the Biggles group, at the Timperley do.

I had tested my new Stomper cut-off and opted out so I attached myself to John Wingate (He must be getting sick of the sight of me by now). I was acting timekeeper/general factotum and John wound his ITZME III Gosling Wakefield for his one and only flight of the day. We go over to the blockhouse for maximum available distance, light up the fuse, launch into good air and up goes ITZME like a lift. D/T was a bit long and the model was very high so recovery was going to be well off the field. John had a bug fitted so he set off on his cycle round the peri-track sometime about midday. I took a bearing on the line and filled in his card then wandered about passing the time of day here and there together with a lunch break.

An hour or so later I'm chatting to Kath, John's wife, who was helping run control, and still no sign of John. I say to Kath "I'll walk down the line and see if he's in the right place, see you later".

I go back to the launch point, pick my bush on the skyline and off I go wading through the jungle. Over the fence at the edge of the airfield, across a couple more fields, and the bush I'm heading for is now a tree on the end of a small spinney. When I arrived John had also found the area and is waving his tracker about with a good signal but could not find the model.

Chris Strachan had retuned his own tracker to John's frequency and was also in wave it about mode as the pair tried to locate the errant Wakefield. Eventually it was some other flyer from further away who spotted the models wing tip in the centre of what I think was a Hawthorn bush cum tree. The model was well out of reach and the tree was not climbable, so we headed back to get some equipment, leaving Chris poking buttons on his tracker trying to retune to his own frequency.

Back at base, I put my 8 Mtr. pole into Johns car ready for recovery and we located some ladders in the back of Trevor Payne's van. We then looked in vain for Trevor, not wishing to abscond with his kit. Our dilemma was solved when the Biggles Squadron, led by John Cooper, arrived and purloined the ladder, loaded up their car and set off to recover John's glider. John Wingate and I set off in hot pursuit in his car to claim 'twos up' on the ladder when the Biggles gang were through.

John Cooper's glider recovery had all the hallmarks of a Whitehall Theatre farce. The model was the best part of fifty feet above ground in the very top of a slender tree. John was swaying about at the top of the two-section ladder propped up against the adjacent tree and he was wielding a totally unstable thirty-foot long sectional alloy tube rod. The rod had a hook on the end but getting it anywhere near to the model was down to pure chance. The hook caught on everything else and we half a dozen helpless onlookers were all dodging falling branches including John at the top of the ladder. It was getting quite hilarious as the de-forestation took place.

The farmer was continually passing by as he ferried tractor loads of something or other back and forth, giving us the thumbs up each time he passed. It took so long to get anywhere near the model that even the farmer eventually ignored the goings on.

Finally a path was cleared to the main branch and, after much swaying about with the pole, it was hooked. That was not the end of it however, as the model was firmly caught, and, although the branch was shaken really well it was some time before one of the wings slid off its dowels and fluttered down. More shaking and eventually all the bits were at ground level including half of the tree.

Then came the inquest. John Cooper had already wrecked one model in the course of compiling his three maximums so he needed undamaged bits of the retrieved glider to try to make up some sort of composite model for the fly-off. Sadly, he could not find satisfactory bits and decided to give it best.

This decision of John Coopers however, was good news for John Wingate, as the Biggles recovery squadron now moved lock stock and barrel across the road for the ITZME retrieval.

A similar story unfolded, the tree was not as high but there was no way that the model could be dragged down through the dense foliage. The ladder was placed near the centre of the tree and John invited me to climb, but I quickly declined. I could see it was going to be virtually impossible to get the model down in one piece and I did not want to be the one that knocked it to pieces. Therefore it was John Wingate who was standing on the top rung of the ladder and, using half the pole, he managed to get the hook tangled up in the Wakefield's undercart. Problem was, that he could not drag the model down and could not untangle the hook. John elected to raise the model as high as he could and then attempted to throw the pole and model towards the outside of the tree. We now had the model and the pole out of reach up the tree. I scouted round and found a half inch diameter iron rod with a big hook on each end which we hooked onto the highest branch we could and then three of us shook the tree as best we could. Eventually the bits were retrieved, the weight of the pole attached to the models undercart brought the Wakefield within reach. The wing and tail survived almost intact but the fuselage was sheared off in front of the wing and the undercart is still up the tree. John was reasonably happy however, as he had his new rubber motor and his bug back.

It was way after five o'clock by now and John and I had been out in the boondocks twice for the best part of five hours but we just made it back to see the fly-offs.

Trevor Payne had returned by now and he needed his ladder, as his model was still up a tree somewhere. He was quite unconcerned however and remarked that the model was safe enough where it was until after the prize presentation.

I'll shut up for this issue, JHA at Wallop next time.

John Andrews

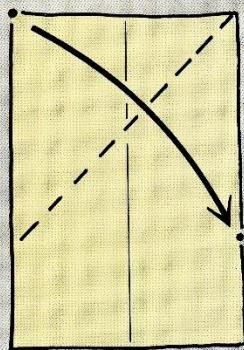
## HARRIER

MICHAEL WEINSTEIN

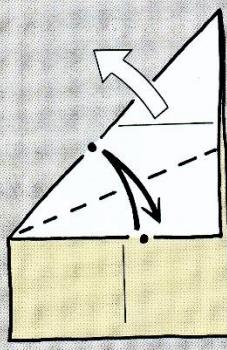
Most paper airplanes depend upon concentrating weight at the front and the challenge is always to achieve this in an unusual and interesting way. This design uses a pleasing sequence of folds to produce a compact "locked" nose section which enables it to fly particularly well. The design isn't based on the British vertical take-off machine, says Michael!

The folding may look involved, but if you fold carefully and keep checking ahead to the next diagram, you will succeed. Make your creases firmly and try not to force the paper. As with all origami, continued folding will make things easier and you will begin to enjoy the moves.

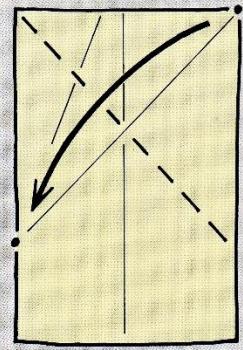
Start with a sheet of A4, colour side up, with the vertical centre-crease added.



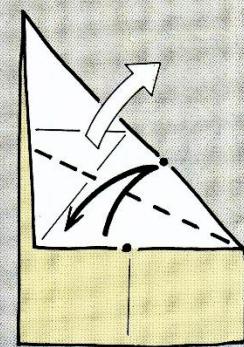
1 Fold the upper short edge to the right-hand long edge.



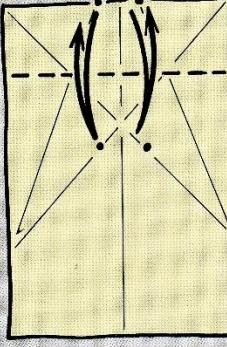
2 Fold the inside raw edge to the upper folded edge and return. Open the paper out again.



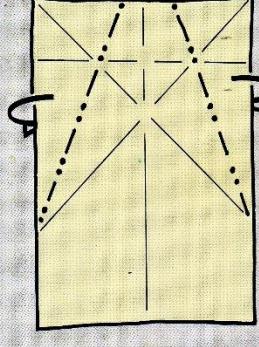
3 Repeat step one to the left-hand side.



4 Again, crease and return before opening out.

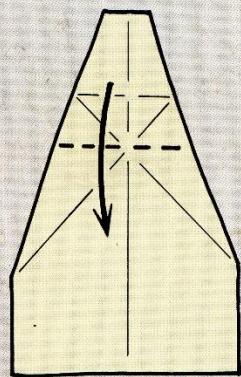


5 Using the location points shown, crease and return.

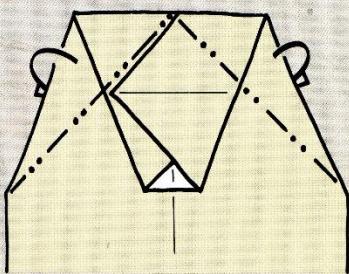


6 Mountain fold both sides behind on established creases, left corner first.

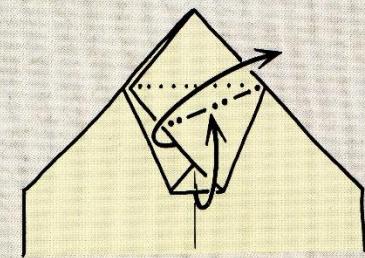
## HARRIER



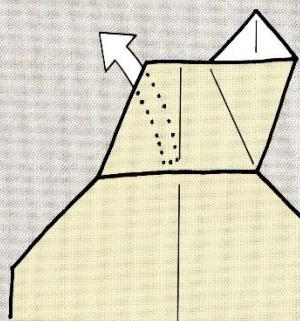
**7** Fold the upper section down, making a crease through the intersection point of the three creases.



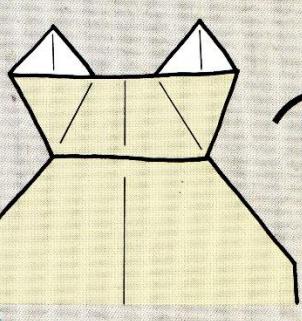
**8** Fold the two corners behind.



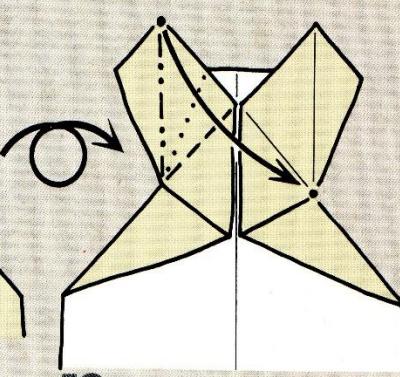
**9** Open the pocket, swinging the flap upwards. As you fold (slowly) the paper will flatten down naturally to produce the mountain crease. Try it and see! If your paper looks different from the diagram, check the order of the folds in step 6.



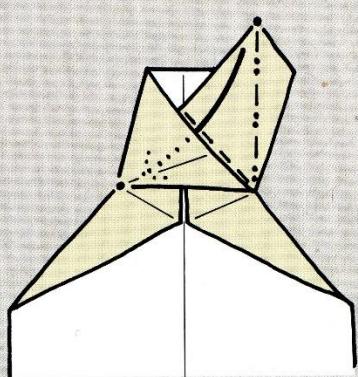
**10** Open out the other hidden corner in the same way as the last step.



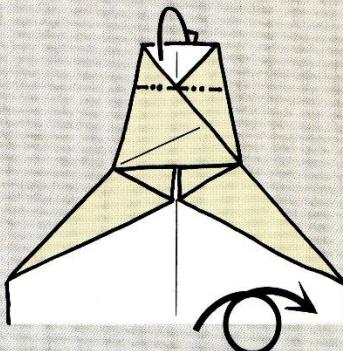
**11** This is the result. Flatten the creases firmly and turn the paper over.



**12** Using established creases, flatten the top left corner to the point shown. The dotted line shows the mountain crease that you flatten upon.

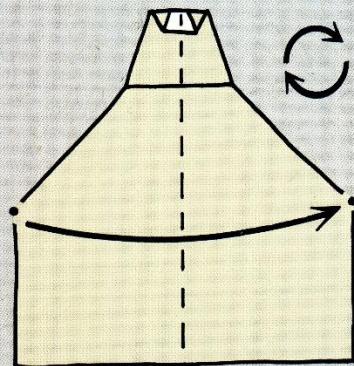


**13** Step 12 created a small pocket; repeat the fold on the top right corner, tucking it within the pocket. Neat, isn't it?

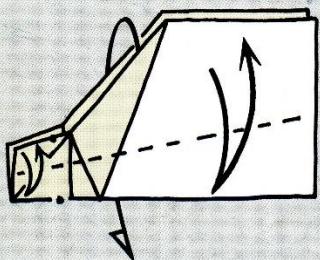


**14** Fold the top edge behind, using the inside corner of the small triangle as a guideline. Turn over.

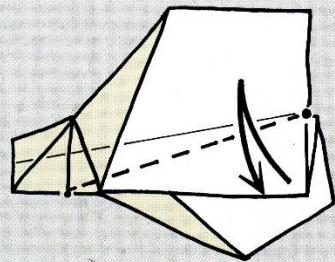
## HARRIER



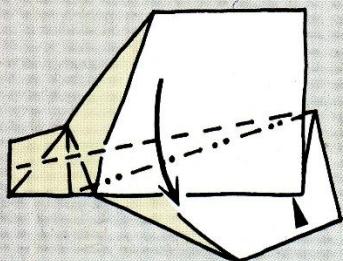
**15** This is how the whole sheet looks now. Fold in half along the centre crease from right to left.



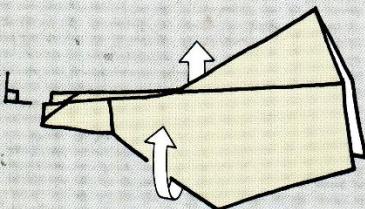
**16** Fold the upper side down, lining up the top and bottom edges of the nose-section. Unfold this side, then fold down behind and leave it down.



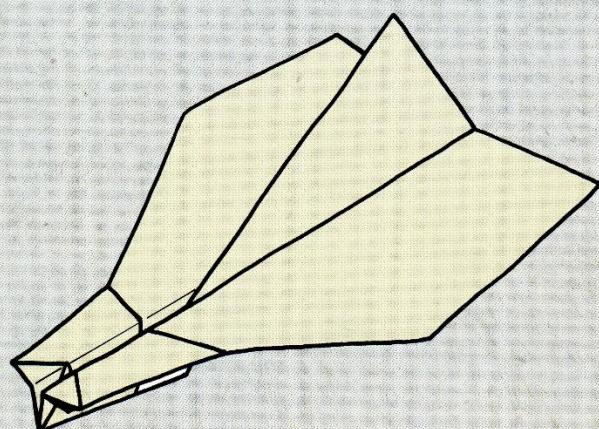
**17** Make a crease that joins the right-hand end of the last crease with the lower edge of the nose section. Crease firmly and return.



**18** Inside reverse fold along the crease made in the last step, then fold the near-side wing down again.

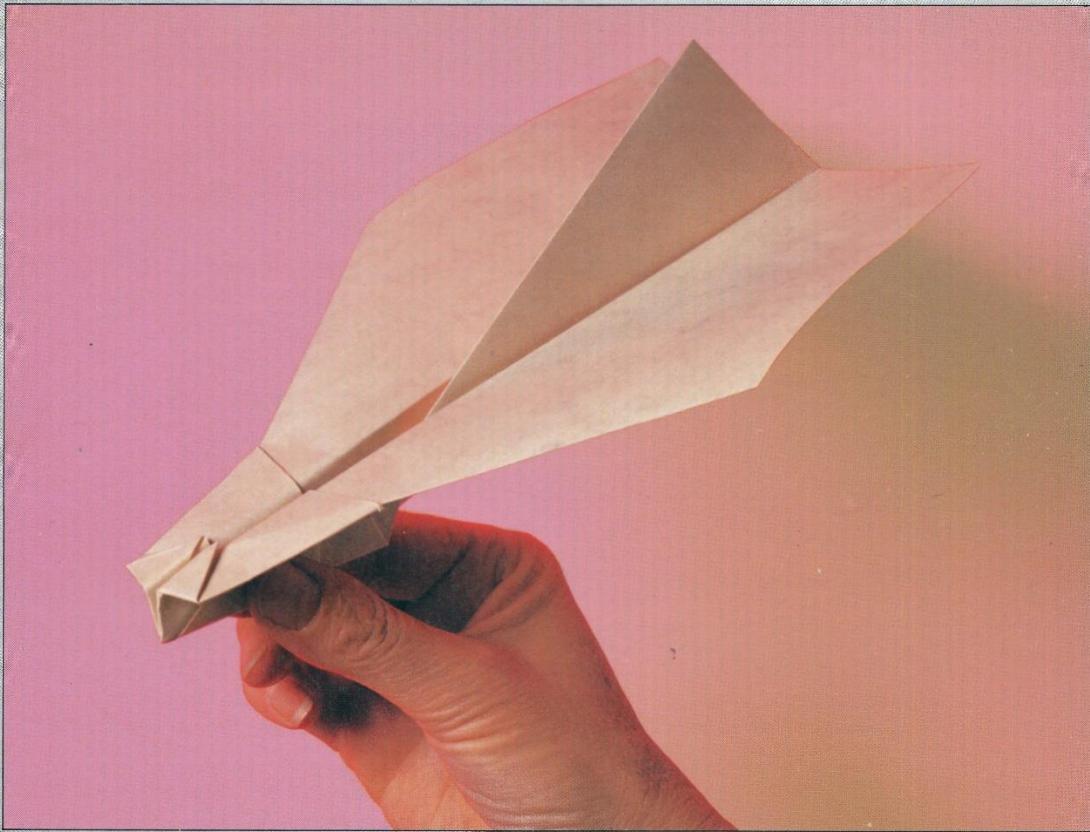


**19** Open the wings out to 90 degrees.

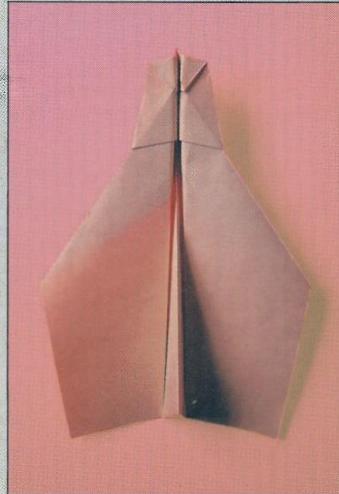


**20** Ready for flight.

## HARRIER



LAUNCHING POSITION



VIEW FROM BELOW

## FLYING HINTS

The weight at the nose makes this a stable design that glides very well. Check the dihedral before flying and experiment with different speeds.

**From the book 'Paper Airplanes' by Nick Robinson**

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*Nick Robinson*

Trying to think of some subject to pen a few words on, I hit upon the idea of adding to my covid inspired misery by attempting to recall all of the model aircraft I have lost. I'm no prolific model builder by any stretch of imagination but I have made a few and lost a few over the years.

The very first model that flew away was a Frog 160 glow powered 'Slicker 50'. The model framework had been gifted to me by my first wife's father in exchange for building a 'Southerner Mite' for him. I had finished the Slicker off and fitted my Frog 160 glow taken from my crashed Small Fry control-liner. This was sometime around 1950, I had just joined 'The Rugby Model Engineering Society Aeronautical Section' and we had a farmers field near Rugby, close to the A45 to fly in. I was very new to Free-flight and not knowing about thermals the model was without engine timer nor D/T. Too much fuel in the tank, up and away went the Slicker, off over the A45 at high altitude never to be seen again. I do not recall having and address label either.



I did not do a great deal of FF in those days as Control-line was my main interest, I did compete but with little success in Rubber, the Gamage & Wakefield trials etc. I did manage to lose a rubber model for a few days in the Gamage one year with a failed D/T flyway. A farmer found it but it had been out in sunshine and rain for a few days and on retrieval it was so warped it was scrapped.

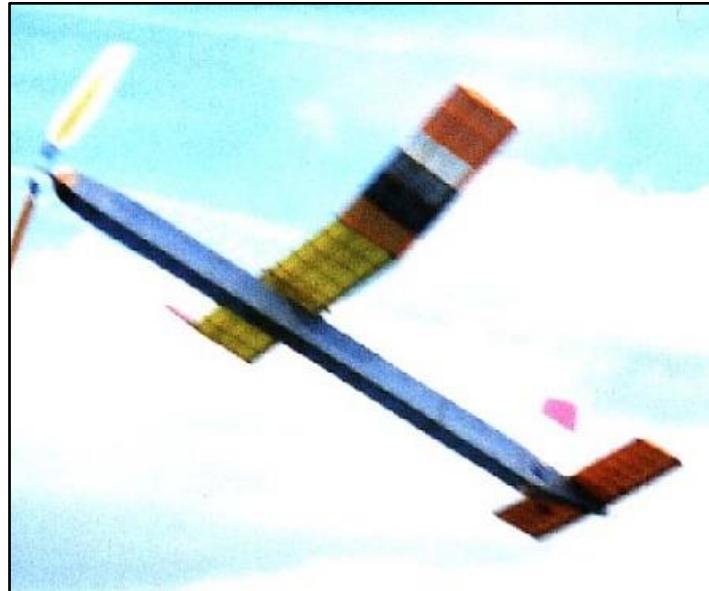
I went through the early days of Radio Control and managed to lose one of those. I bought the early ED soft valve radio control equipment, ground based Tx with micro-switch control button etc. I made a model powered by an ancient Frog100 using an old Power model wing and had one good afternoon flying before flying out of range in the dusk of the evening, Bye Bye radio. I did not get back into serious FF until well after my army national service days.



After demob from national service in 1956 I was well into R/C for a number of years, at first making my own equipment, then through reeds up to proportional, FF was not even thought about. I took early retirement in 1993 and continued with R/C until I got a bit fed up with it. About this time I had met/reacquainted myself with Birmingham Club's Peter Martin who introduced me to Middle Wallop and Vintage, I was soon back into FF again.

The first model I lost after my reincarnation as a free-fighter was my initial open rubber model. It was a bit of a hotch-potch by the time I had it trimmed. I was competing at Wallop and managed to grab a bit of good air but when the D/T went the model was over the wood.

My mate in those early days was John Nicholson and we spent a lot of time searching to no avail. We checked the open ground past the wood but no model. We concluded the model was treed and spent most of the rest of the day wandering about staring up at the leafy canopy. The variegated colour scheme on the model brought about by modifications and repairs was obviously a hindrance as it made good camouflage. All we managed to get was neck ache. The model was past its sell by date really but it had 100gms of new rubber in it. The first loss of my new era.



It was sometime later that I managed to lose a 'Lulu' on its first day out at Wallop. I was trying to get it up on the long towline, failed but hooked a monster thermal. The 'Lulu' was high in the air over the museum when the D/T deployed but the model ignored it and disappeared over the housing estate still rising. Rachel was now my support group and we searched till late but no luck. Scratch one 'Lulu'.

Next one to go was my first 'Stomper'. It was at one of the Nationals in the early 2000's. My 'Stomper' No1 D/T'd possibly into a large field full of pampas like grass and as Rachel & I could not find it elsewhere we assumed it was buried in the crop. The field was full of modellers waving tracker receivers about so we hoped that one of them might stumble upon our lost model. No such luck, never heard anything, lost a really good engine, an early PAW 1.5, in that model.



Peter Martin got me into attending the Peterborough Club's Flying Aces comp in Ferry Meadows, a small field event with a multitude of classes. I lost my first 'Cloud Tramp' there, Pete and I flew at the same time trimming our Tramps and as our two models circled alongside each other at the edge of the field, Pete's glided down and mine hooked lift and was up and away. I followed it to the edge of the lake but by then it was miles up and long gone. No name and address label.

I also lost a specially built rubber model I made for the Duration Rubber Ratio comp. The comp is for models 16" to 25" wingspan and the score is the three flight total time in seconds divided by the wingspan. I made an 18" wingspan very low aspect ratio model using my normal 5" chord outdoor wing ribs. I could not get it to fly on any more than about half turns but I managed to get some flights in. The final flight was quite good in good air and it came down somewhere over the preserved railway line but we could not find it. There were large bramble patches and a spinney beyond, we had a good line but no luck. I suppose it was not a complete loss as I had a phone call several weeks later from a guy who had found the fuselage whilst walking his dog in the spinney. Conversation revealed that all he had was the well weathered fuselage, no prop, no wing, no tail, the only thing of value left was the Tomy mechanism.

I thanked him for calling and asked that he confine the debris to the dustbin. The model must have been treed and eventually blown down.

I built a Spencer Willis 'Mazee', lost it, and flushed with success built another and lost that to. I had fancied a tailless model and Spencer provided me with a superb set of laser cut wing ribs and one of his prop assemblies. The model is a real easy build using Spencer's parts.



I first took 'Mazee' No1 to a windy Wallop and trimming was almost impossible, a few turns and hold into wind, up and down splat. Gave up trimming and decided to wind on quite a few turns and make a first comp flight attempt and record a score whatever.

To my astonishment 'Mazee' 1 flew away steadily and gained a significant height before turns ran out, but then fluttered down with no signs of a glide.

Not knowing what to do about trimming tailless, I elected to stick a blob of plasticine on the nose and try again for a second comp flight. More turns and a repeat performance but higher and longer still without glide.

Third comp flight, more plasticine, more turns. Model went even higher and recorded over 1 minute if memory serves. Best of all it looked like it was gliding but it was quite a way away so I was not too sure.

The Nationals was next up and after a quick test hop I wound and launched for my first comp flight, 'Mazee 1' shot up in really good air and was still going up at D/T time. We could not tell if the fancy drag flap D/T deployed but "Mazee 1" just kept going. Exit my first tailless model.

I swiftly contacted Spencer for another set of bits and soon had 'Mazee II' ready. This time I fitted the normal tip-up wing/drop-down fuselage D/T.

First time out was Oxford, Port Meadow. I do not recall how many flights I had but the final one was good and we saw the model down against the tree background over by the railway. The model could not be located even though there was nothing over there but cattle. Minor compensation, at least I won the event but never saw 'Mazee II' again, I imagine light fingered Joe Public was to blame. Exit tailless No2.

I've got yet another set of bits from Spencer but they remain on the back burner and I doubt it will ever be lit.

Next model for the chop was, what I consider as my best performer, my 'Last Resort'. This design by Jim Bagley is a real winner, not too large, easily built and repaired. The fuselage on mine had been in two pieces a couple of times but repair was simple, the bits were strapped to a 1m steel rule and all the missing bits filled in whilst the rule kept it all straight.

I flew mine on 50gms of rubber made up of 12 strands of 3/16. Quite a powerful motor but it keeps the model climbing well whatever the wind and it powers through ground turbulence in short order. I think it's the ideal size for a simple BMFA 50gm rubber design.

I would build a 'BMFA Rubber Model' to exactly the same dimensions but abandon the frills of circular tips on the wing tail and fin.

The prop is probably OK but perhaps a narrower two-bladed one would fold neater.

Back to my 'Last Resort', I lost it at North Luffenham in 2016, it was just a D/T failure with the model way up in lift. Incidentally I have realised where my hook-up of the D/T line on the Tomy goes wrong and leads to failure. I have the hook-up pin on the timer knob too near the outside end and the rubber band looped around it can slip off the end and the timer no longer works. For the cure, I just have to pull it off the knob to wind around the shaft. Back to the 'Last Resort' again, I lost a Bodnar bug with it as well. Searched for a bit around the JO'D seven mile recommendation for fly-aways but not a peep. Should build another really but the way things are at the minute there's no comps to fly in. By the time this corona virus is licked, by vaccines I assume, we will have no airfields left to run comps on anyway.

The last of my fleet to go missing was my very aged 'Hep-Cat' which was built in late 1900's, not sure when, but it was before I made my 'Tomboy' and that is 20 yrs old.

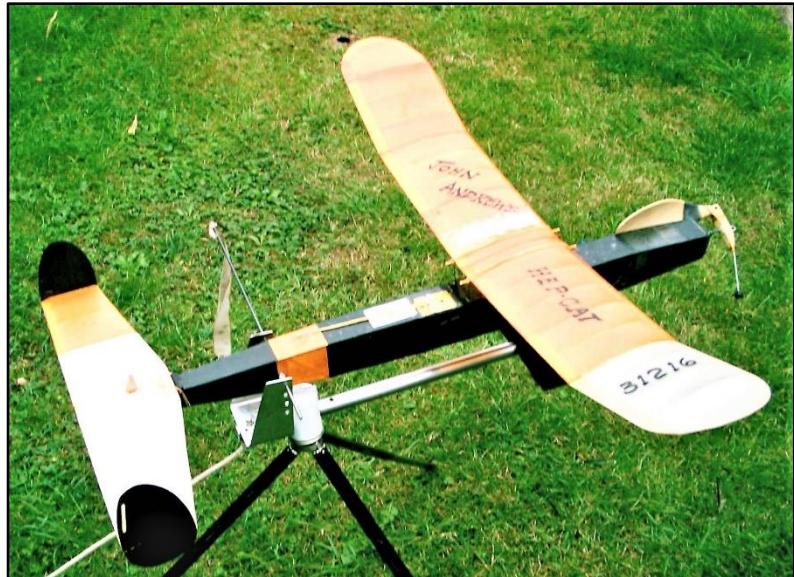
I built the 'Hep-Cat' to replace my first mini-vintage model which of course was the inevitable 'Senator'.

The 'Hep-Cat' was a good performer in its early days but as time and repairs wore on it became heavier and heavier and I finally replace it with a 'Pinochio'.

I've just been scouring my flight log-book but the 'Hep-Cat's demise is not recorded, I can remember it disappearing way up in the blue somewhere due to good lift and one of my D/T hook-up failures. I'm fairly sure it was at North Luffenham and it was heading for the reservoir miles up. The model was still in use in 2016 but after then it no longer features in the logbook. Another Bodnar bug gone but more importantly the lynchpin of my mini-vintage competition participation over the years.

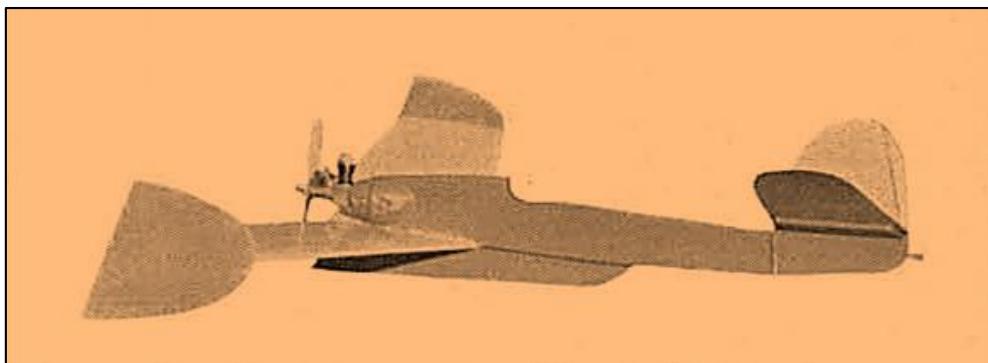
Well that's that, I've stopped crying now, not too long a list. A list of models that lie in various stages of dis-repair in the workshop and in boxes in the garage would be much longer I fear, also one or two part built projects to boot.

It's interesting to note that loss of a model is taken much more to heart by Rachel, the wife, beats me why.



John Andrews

# → REZENEBE



A lively 18 inch span tail-first free flight model for .010 engines designed by Australian down-under-tail-first exponent, **JIM FULLARTON**

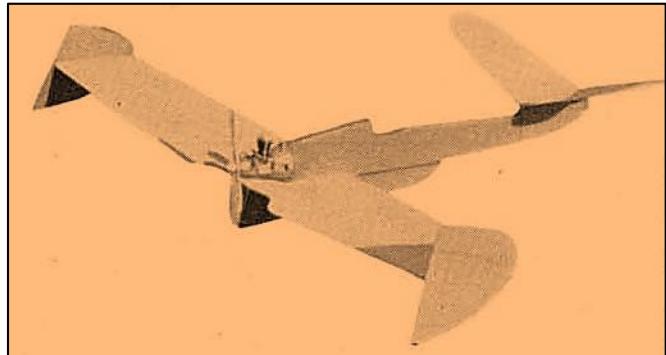
It all started one day when we were playing around with that **wonderful** word of Bert Streigler's, and found out it could be written backwards. After that discovery, there was only one thing for it. There just **had** to be a canard **EBENEZER**. What is more, it had to be a real canard, not one of your half-baked tractor efforts, but a genuine tail-first, propeller-last **pusher**, like they used to build back in '09

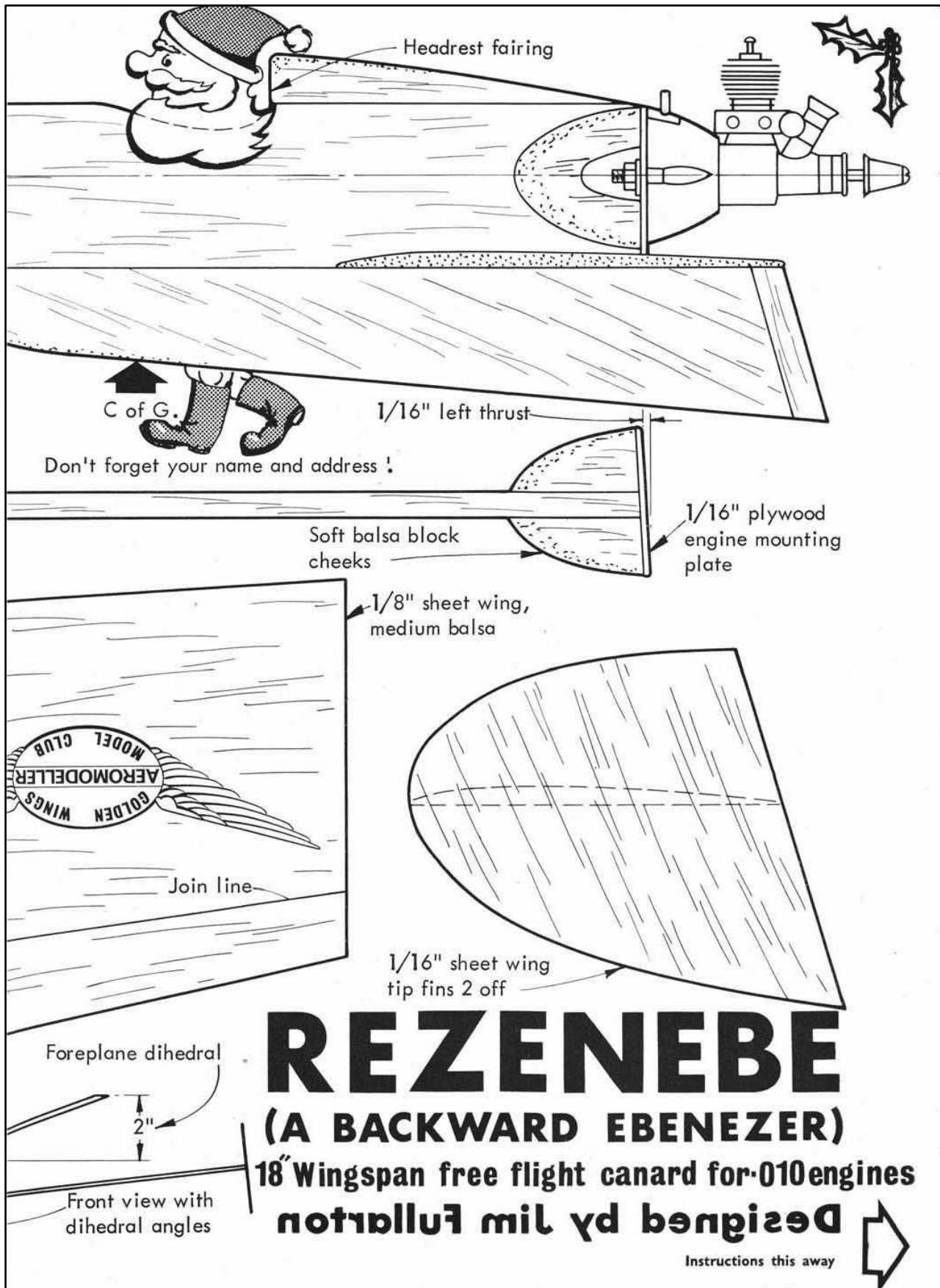
We will not bore regular readers with a detailed description of construction, beyond a reminder to use light material (and not too much paint either) behind the C.G. so as to minimise the amount of nose ballast required. The foreplane has a thicker section than the wing and has a turbulator to prevent premature stalling.

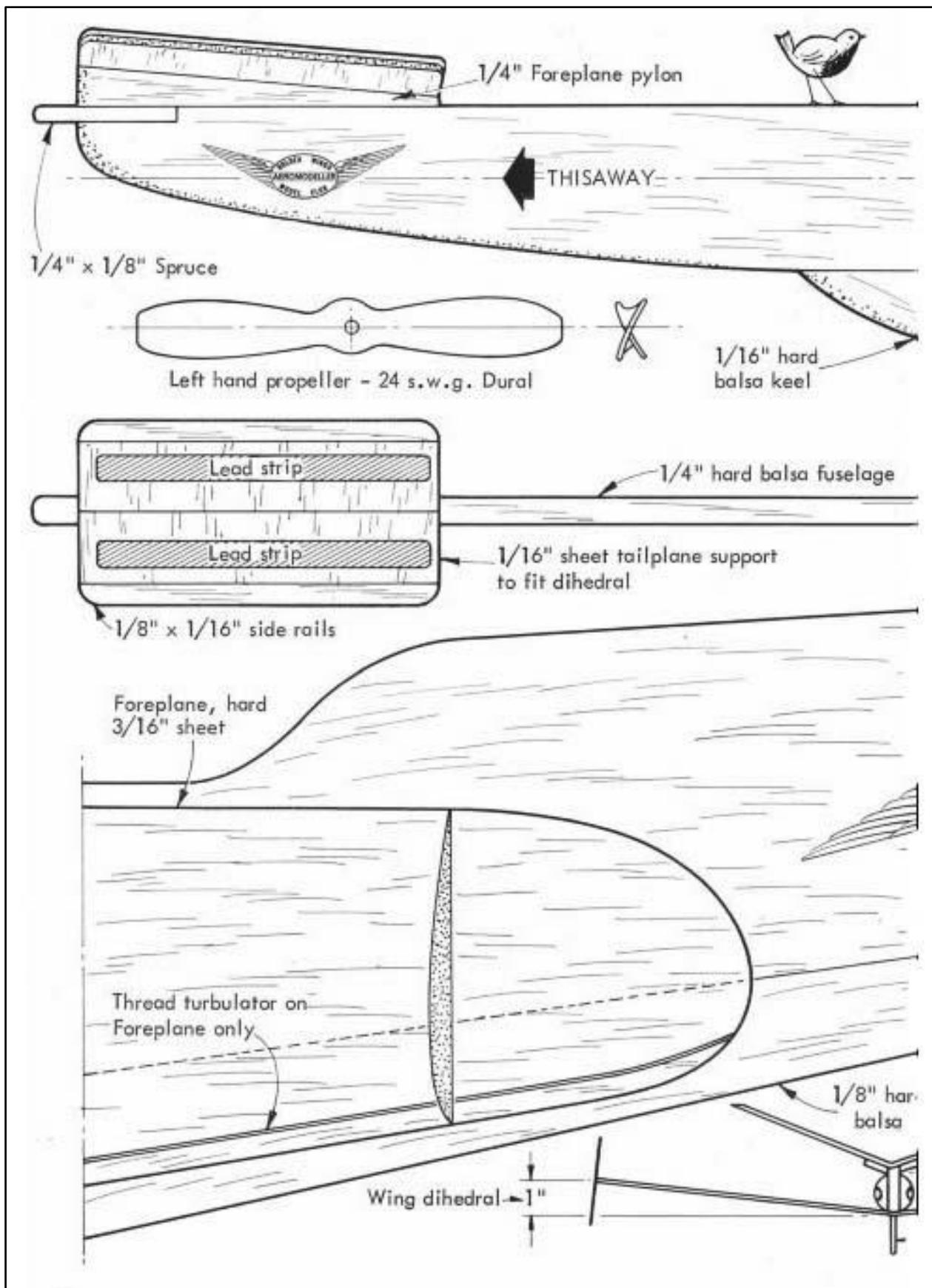
To make Mr. Cox's tiny powerhouse "Push" instead of "Pull", we need a left hand propeller, which is bent from dural. This will be quite safe provided you do not use soft aluminium, and replace rather than straighten it should it ever become badly bent (most unlikely on a canard.)

Incidentally, with a new motor and a pusher prop., you may have some trouble with overheating until it is run in. Correct location of the C.G. is absolutely vital, so when completely painted and assembled, balance at the point shown by cementing lead strips to the elevator platform. The wing is fixed, but the elevator is attached by rubber bands, and the angle may be varied by packing as required to get a satisfactory glide trim. A small celluloid tab may be used on the left fin to induce a wide left glide turn. The left thrust offset shown should produce a safe right turn (things are reversed on a canard) under **power**.

Work up to full power gradually, (not too much fuel in the tank either) and your model will soon be turning in flights which will be all the more spectacular because it is apparently flying backwards!







Extracted from Aeromodeller December 1966

Jim Fullarton

### Propeller carving

My old friend Tim Mountain is promising to carve a prop for his new Veron Fledgeling, so I thought I'd produce a brief article on how I made mine.

A nine inch diameter is specified on the plan, but to comply with Under 25" rules an eight inch propeller is required.

I have found that Chris Strachan's recommendation of the Albert Hatfull Felix prop works well.

Fig 1 shows the prop blank specified on the Felix plan, published in the December 1998 edition of the AeroModeller. I have added a couple of missing dimensions. This gives a propeller with a pitch of around 10".

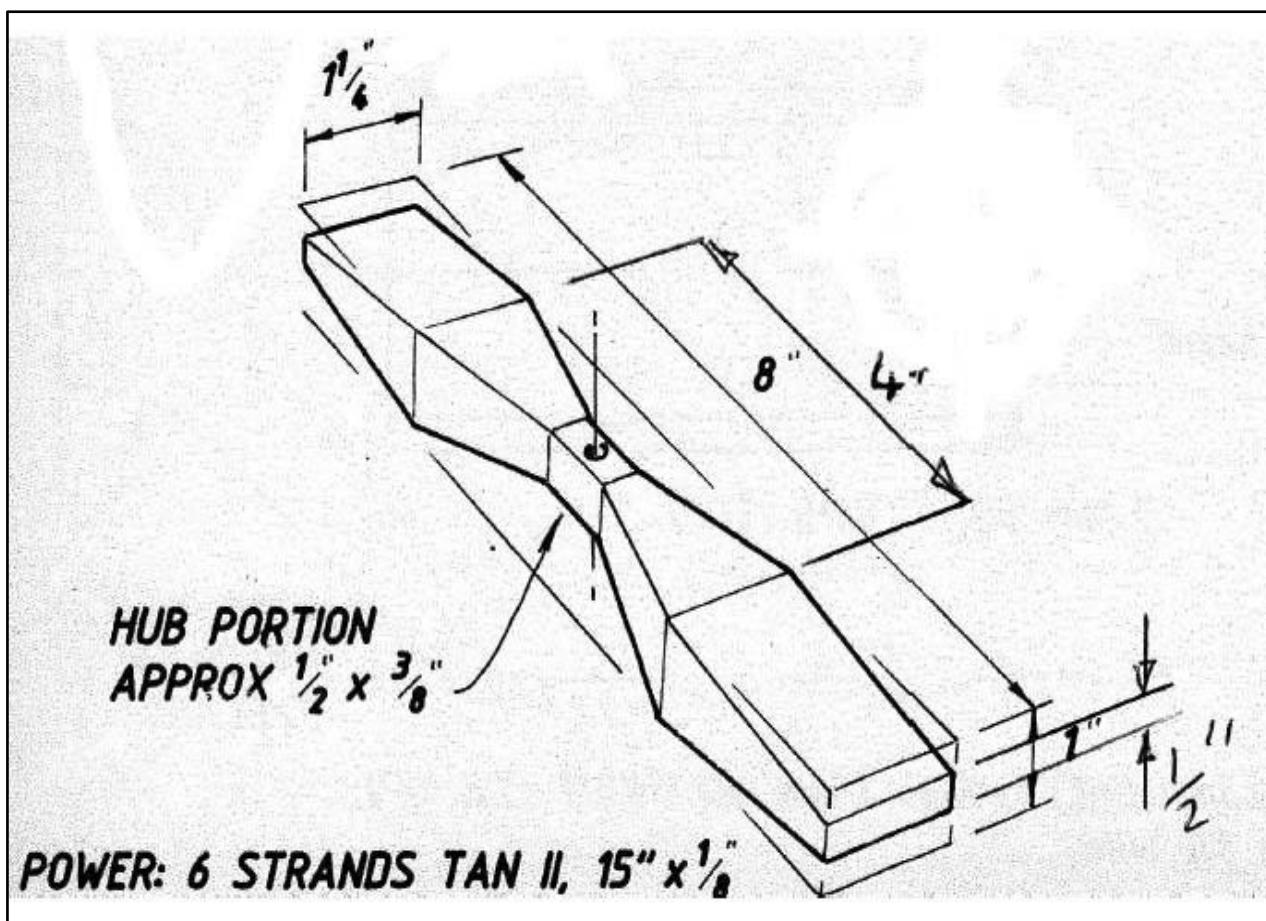


Fig. 1. The 8 in diameter propeller blank from Albert Hatfull's Felix plan

The key to making a successful propeller by carving is in the production of the blank. In this case wood of around 8 lb/ft<sup>3</sup> was used, giving a block  $8 \times 1 \frac{1}{4} \times 1"$  weighing about 20 g. The block is marked out as shown in Fig.1 and now is a good time to drill the hole for the prop shaft bushing. The blank is then cut out using a suitable saw, the key being to ensure that the form is square. I use an Aeropiccola Vibrosaw, a sort of electric fretsaw or scroll saw, which I've had for many years. I then follow the procedure as described by John Meaney in Andrew Longhurst's Rubber Column in the March 1993 edition of SAM35Speaks and carve the back of the blade using a long bladed straight knife and finish by sanding with a round form (Figs 2 and 3). Some of the front side of the blades can be also carved away at this stage.

The next step is to prepare a paper template of the finished blade form and mark this on the rear side of the blade (Fig. 4). The material outside the lines is removed at right angles to the rear blade surface and thin ply strips attached with cyanoacrylate flush with the rear surface to give a hard edge to the blade. In this case the strips were of 1/16" width cut from 0.5mm ply. The front surface of the blade is now carved and sanded to the edge strip (Fig. 5).

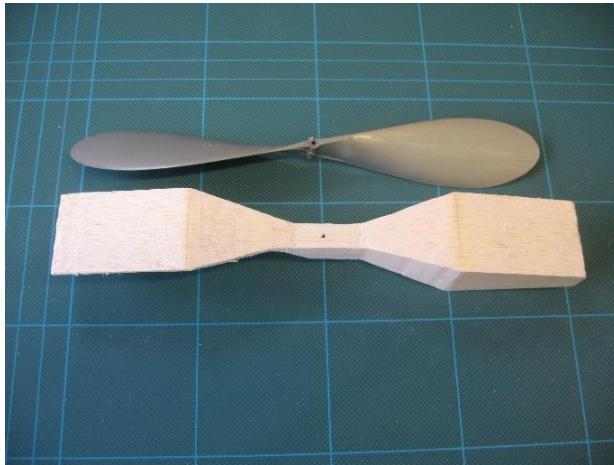


Fig. 2. Front view of balsa prop blank,  
the rear has been carved away.  
8" Peck plastic prop shown for comparison



Fig.3. Rear view of balsa prop with carved blade form.  
8" Peck plastic prop shown for comparison

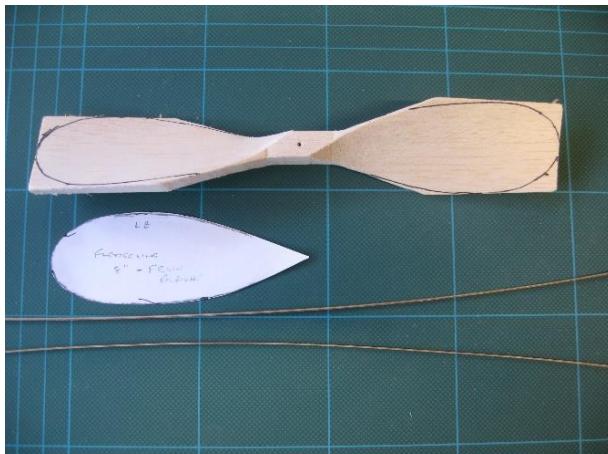


Fig. 4. Rear view of prop with blade shape  
marked out using paper template.  
0.5mm ply edging strips also shown.

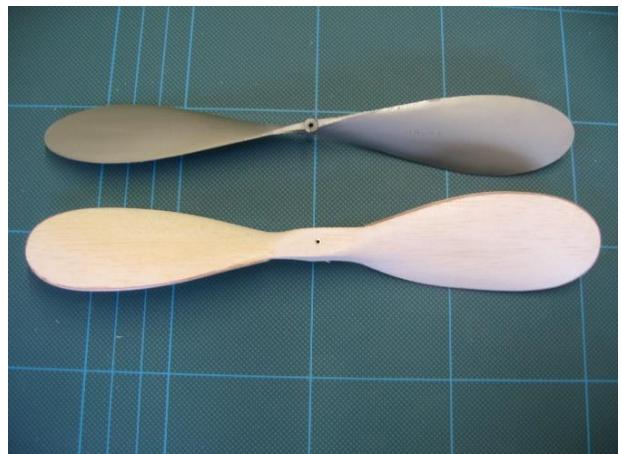


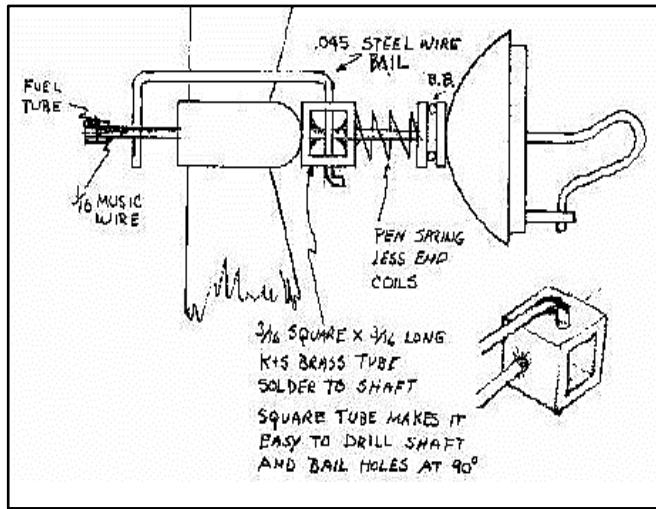
Fig. 5. Front view of carved balsa prop,  
ready for final finishing  
in comparison with plastic prop

The weight of the carved balsa propeller was just under 3 g. This shows that carving a propeller is very wasteful in terms of material, but it is an extremely satisfying process! I applied a couple of coats of sanding sealer and then attached some very fine glass cloth with dope, and then finished the surface with black Esaki tissue, giving a weight of 4 g. This is still less than that of the plastic propeller.

The finished article is shown in Fig. 6. The free-wheel mechanism that I fitted was based on Bob Lieber's design developed for P30s (Fig. 7). The essence of this is a 3/16" length of 3/16" square brass tubing which is drilled for the prop shaft and the wire free-wheel bail and then soldered to the shaft. The big advantages of this device is that it is easy to change a propeller, if necessary, and for P30s, no modifications are required. In the case of the Fledgeling, I used an 18 swg prop shaft and a 1/32" dia bail. I dispensed with the tensioner spring and shaft stop, instead relying on a pre-tensioned motor.

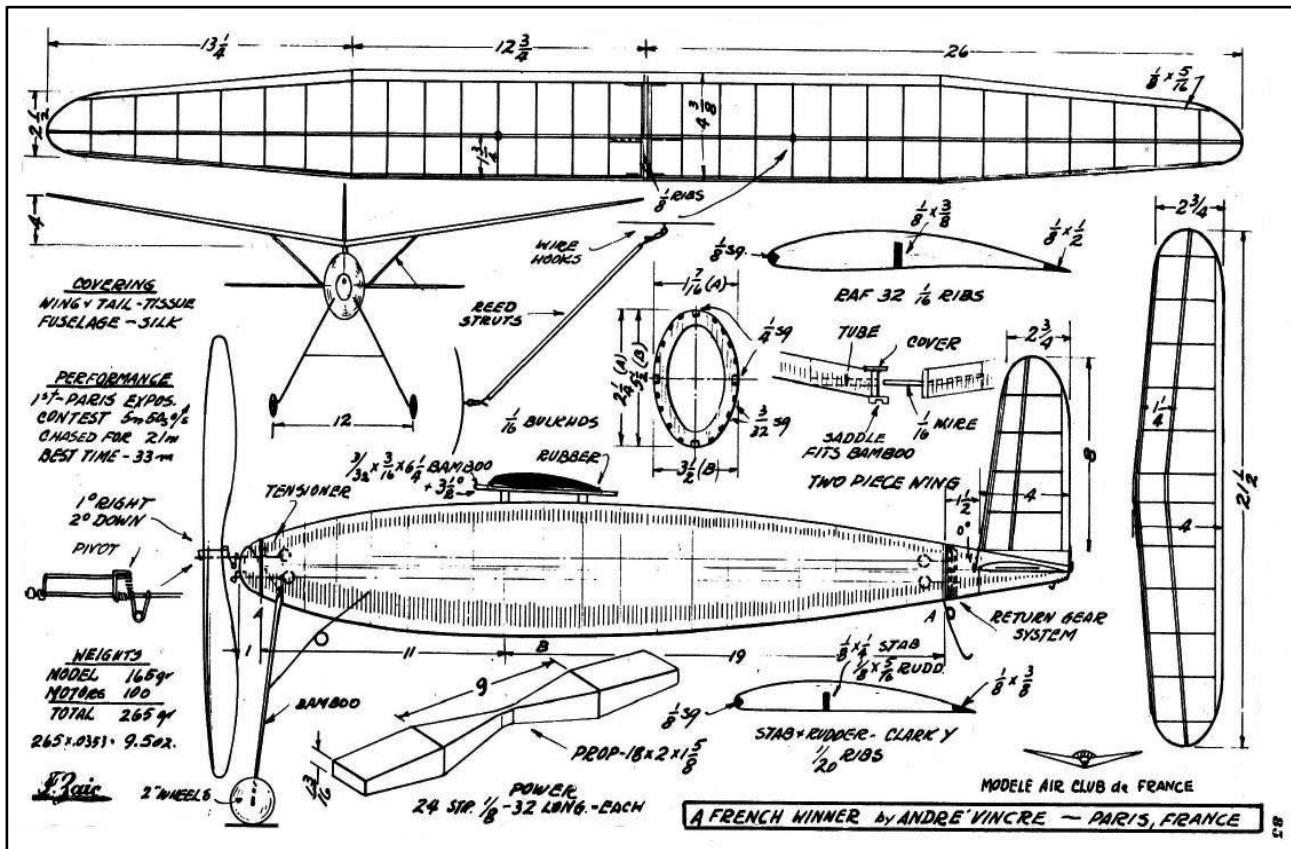


**Fig. 6. Finished propeller fitted to Fledgeling**



**Fig. 7. Bob Lieber's latch freewheel for P30s.**

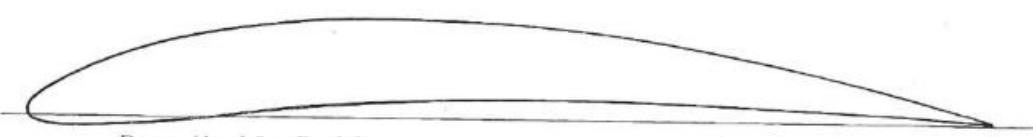
Bob Lieber derived his freewheel design from that shown in the drawing of Andre Vincré's Wakefield by Frank Zaic in the 1938 Model Aeronautics Yearbook.



**Frank Zaic's drawing of Andre Vincré high aspect ratio Wakefield showing a latch type freewheel in bottom left hand corner (1938 YB).**

Much more useful information on propellers for rubber powered models can be found in Mike Woodhouse's compilation 'Rubber Model Propellers', available from [www.freeflightsupplies.co.uk](http://www.freeflightsupplies.co.uk).

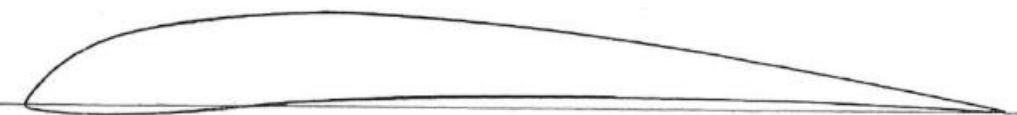
Nick Peppiatt



DAVIS (A=1.0; B=0.2)

Station ...	0	2.5	5.0	10	20	30	40	50	60	70	80	90	100
Upper ...	0	3.4	5.0	7.2	9.8	11.1	11.5	11.0	9.9	8.2	6.1	3.4	0
Lower ...	0	-1.0	-1.2	-0.9	-0.2	0.6	1.2	1.7	1.9	1.9	1.6	1.0	0

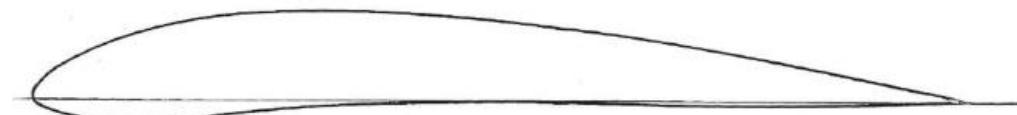
A reliable section for the average model.



N.A.C.A. 6409

Station ...	0	2.5	5.0	10	20	30	40	50	60	70	80	90	100
Upper ...	0	2.96	4.3	6.31	8.88	10.13	10.35	9.81	8.78	7.28	5.34	2.95	0
Lower ...	0	-1.11	-1.18	-0.88	*0.17	1.12	1.65	1.86	1.92	1.76	1.36	0.74	0

This has been found particularly successful with medium-sized power duration models. N.A.C.A. 6412, 4409, and 6512 are related sections which have proved their worth, and ordinates may be found in *Airfoil Sections*, by R. H. Warring.



GRANT X-9

Station ...	0	2.5	5.0	10	20	30	40	50	60	70	80	90	100
Upper ...	0	3.37	4.78	6.97	8.84	9.47	9.3	8.57	7.44	5.97	4.24	2.2	0.05
Lower ...	0	-1.5	-2.1	-2.48	-1.73	-0.8	-0.47	-0.54	-0.74	-0.83	-0.63	-0.37	-0.05

The Grant series of "X" sections vary in thickness to suit practically any size of model. The X-9 has proved very successful for power-duration, and both this and the thinner designs are suitable for rubber models. The complete range can be found in Grant's "Model Airplane Design."



R.A.F. 32

Station ...	0	2.5	5.0	10	20	30	40	50	60	70	80	90	100
Upper ...	3.42	6.52	7.84	9.72	11.92	12.08	13.1	12.46	11.06	9.1	6.56	3.6	0.12
Lower ...	3.42	1.5	0.88	0.3	0.0	0.3	0.7	1.1	1.46	1.6	1.46	0.92	0.12

Models using this section have been consistent prize winners since early times. It is probably the best orthodox section for general use, due to its maximum camber being so far back.

## Report No. 118 Tidy up, continued.

Last month I was struggling with the translation of information in Swedish on a plan published in *Stabben*, a Swedish aeromodelling Newsletter from 1972.

Here, again, is the original and the Google translation.

HÄR ÄR DEN. AZAN SOM  
AKG:s A2-FLYCARE GEHENSAKT  
KONSTRUERAT FÖR TURBULENT  
LUFT OCH TERMIK. GÅ NU TILL  
BYGGBRÄDAN OCH BYGG EN.

HERE IT IS, AZAN AS AKA's A2- FLYCARE  
JOINTLY CONSTRUCTED FOR TURBULANT AIR  
AND THERMAL, NOW GO TO BUILD BRADAW  
AND BKR EN.

Do not be too hard on Google translate, the original was hand written and in aeromodelling Swedish as written half a century ago.

Christian Schwartzbach came to the rescue by email as below.

"Hello Roy, I am not fluent in Swedish, but capable of translation of the text in Clarion.

**Here it is. The A2 designed jointly by the A2-flyers of AKG for turbulent air and thermals. Now go to the building board and build one.**

The signature is Lars Göran Olofsson of course. AKG must be the Aero Klub of Gothenburg.

Best regards

Christian"

Thank you Christian, I can now complete the entry in the "List of Plans in Mags" to show the model name as "A2 for Turbulent Air and Thermals", the designer as "A2 Flyers of Aero Klub of Gothenburg" and the draughtsman as "Lars G Olofsson".

The promised "Thank you" of a copy of *Stabben* is now at on its way to Christian at his home in Denmark. The Post Office web site was used to print the address label and customs declaration form and arrange for the package to be collected from my front door by Mike, my local postman. All for just a £0.70 surcharge on the postage cost, so there you have it, the one good thing to come out of shutdown.

A little while ago I was seeking copies of *Arm Soar* and having received no response I placed an advert in SAM 35 Speaks Classified Ads column which brought the email response below from Andre Bird.

"Morning Roy,

In the run up to the recent Old Warden event I had a bit of a clear out and took several boxes of stuff to Old Warden. These were left near to the control tower with signs on them saying that they were free to anyone that wanted them. The short version of events is that my car broke down at Old Warden, I called the AA on Sunday afternoon, and they didn't get my dad and I home to Norwich until 10:00 on the Monday. The reason I'm telling you this is that there were chuck glider magazines in the boxes. I think that there was Arm Soar and Heave Ho which if I remember correctly, were published by the same guy. Was it Kevin from Leeds? I think that one was published for a few years and then replaced with the other but I can't remember the details. I used to build lots of chuck gliders and I think that there was a complete run of the magazines in the box. It might be worth you contacting someone at Old Warden or one of the event organisers to ask if all of the stuff went. Because of the car issues I don't know what happened to the boxes and the magazines. It would be lovely if someone had kept that box for you.

Good luck,

André."

My reply to Andre, included reference to the two Kevins.

"I have had a quick look at my copies of Heave Ho and Arm Soar and they were both run by Kevins, Heave Ho from 1996 to 2000 was produced by Kevin Brown of Bath. The last issue carried a note to the effect that the Heave Ho Postal Comp would in future be run by Kevin Moseley. Arm Soar 2000 to 2004 was produced by Kevin Moseley, as you say, from Leeds."

The aeromodelling meetings at Old Warden are run by Ken and Sheila Sheppard of Modelair to whom I sent an email asking about the boxes left by the control tower. I received a prompt reply saying that they remembered the boxes and would make enquiries about what happened to them. The chances of the boxes still being to hand somewhere and still containing copies of **Arm Soar** must be pretty small, so they remain on the wanted list.

The latest issue of Aeromodeller, December 2020, carries a note from the editor, Andrew Boddington, that he is seeking a plan for the Bowden designed 44" wingspan model named the Kangette. If you can help Andrew contact him on [editor@aeromodeller.com](mailto:editor@aeromodeller.com).

This led me to have a look through Bowden's book "Petrol Engined Model Aircraft" where I learnt that control line flying is just a version of free flight. Hope that you find it of interest.

#### AN AMERICAN LINE FLYING MODEL. WITH REMOTE CONTROL

It is becoming increasingly popular to fly a model round the operator, with the model tethered to a line and with one or more lines to control its elevator and in some cases its engine\*

Picture below may interest readers, as it shows an early experiment on these lines carried out by Dr. Forster and myself, using one of his general-purpose models attached to a fishing line and rod. Unless the elevator can be controlled, the snag is, of course, that, except in dead calm weather, the model climbs during the upwind part of the circle and dives down on the down-wind part. Remote or "U" control largely gets over this difficulty, but in calm weather it is possible to fly a model round oneself, playing it with a rod and line.



As the Americans introduced the cult on a serious scale, I am reproducing drawings of an American model, and extracts from the writings of a well-known American exponent.

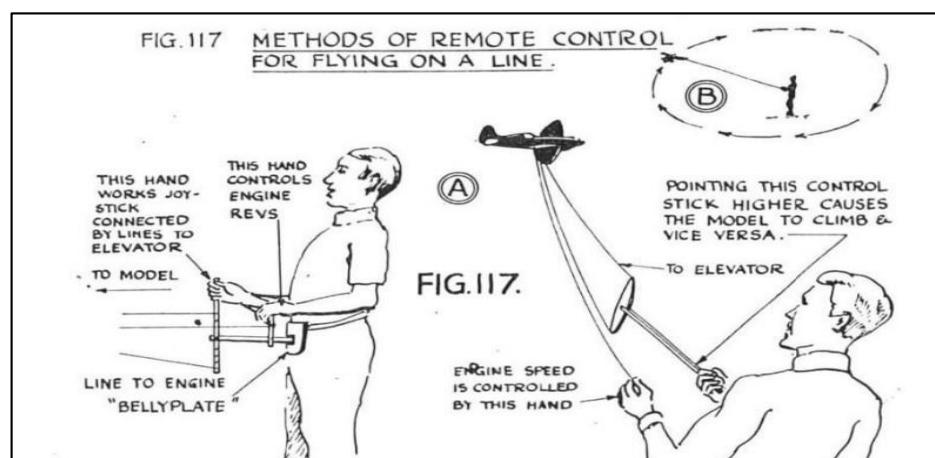


Fig. 117 shows two American methods. The left-hand sketch is the subject of extracts, published in this chapter, from an article by Mr. William B. Schwab, a well-known modellist of America, and originally published in Gas Models.

Extracts from Mr. Schwab's American Article:

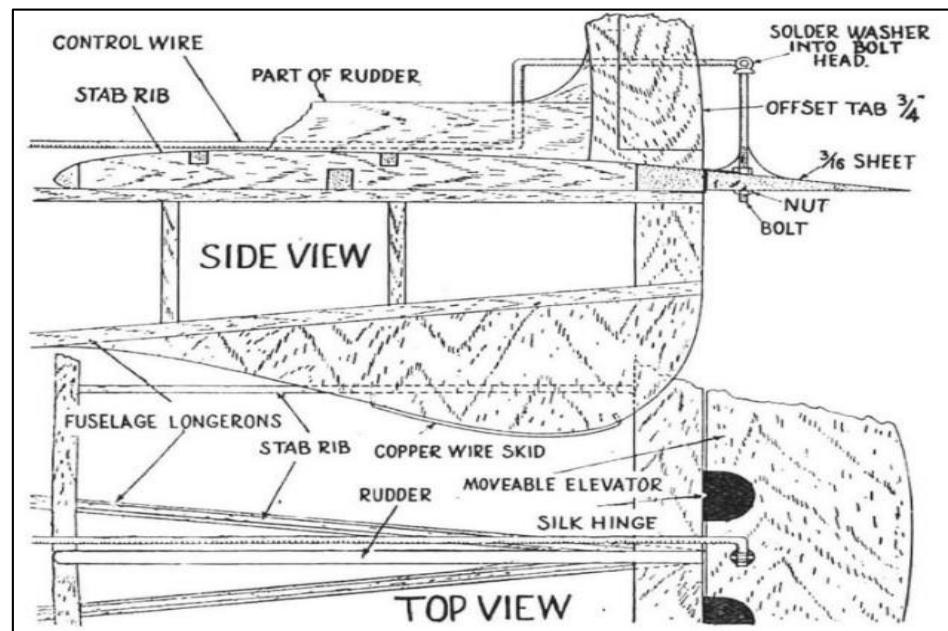
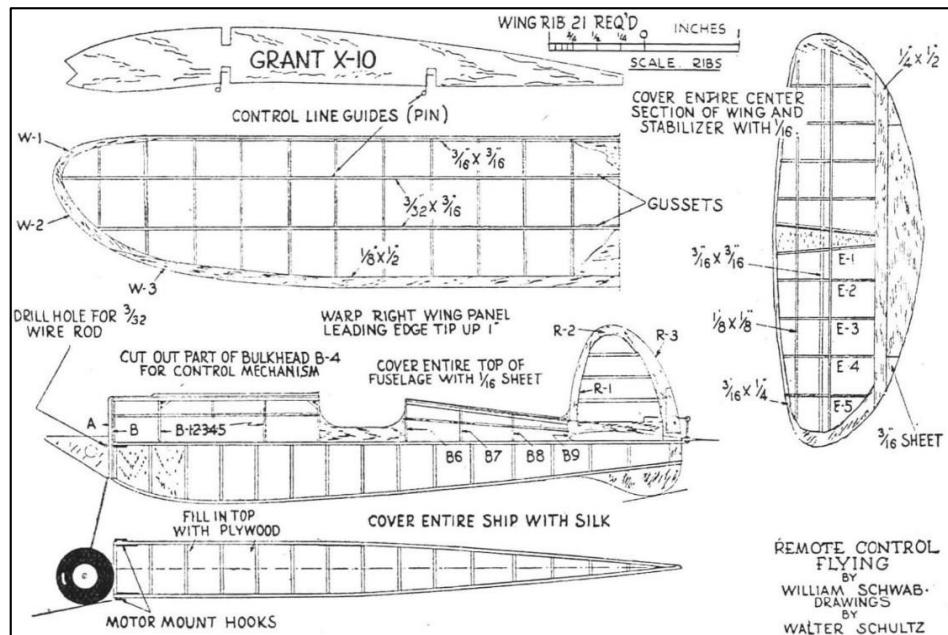
Just for the fun of it we took one of our old crates and connected a string to the wing tip, one-third from the leading edge. A tab was glued to the rudder and wing to make the ship tend to pull away from the operator, or turn sharp to the left, the ship flying in a clockwise direction.

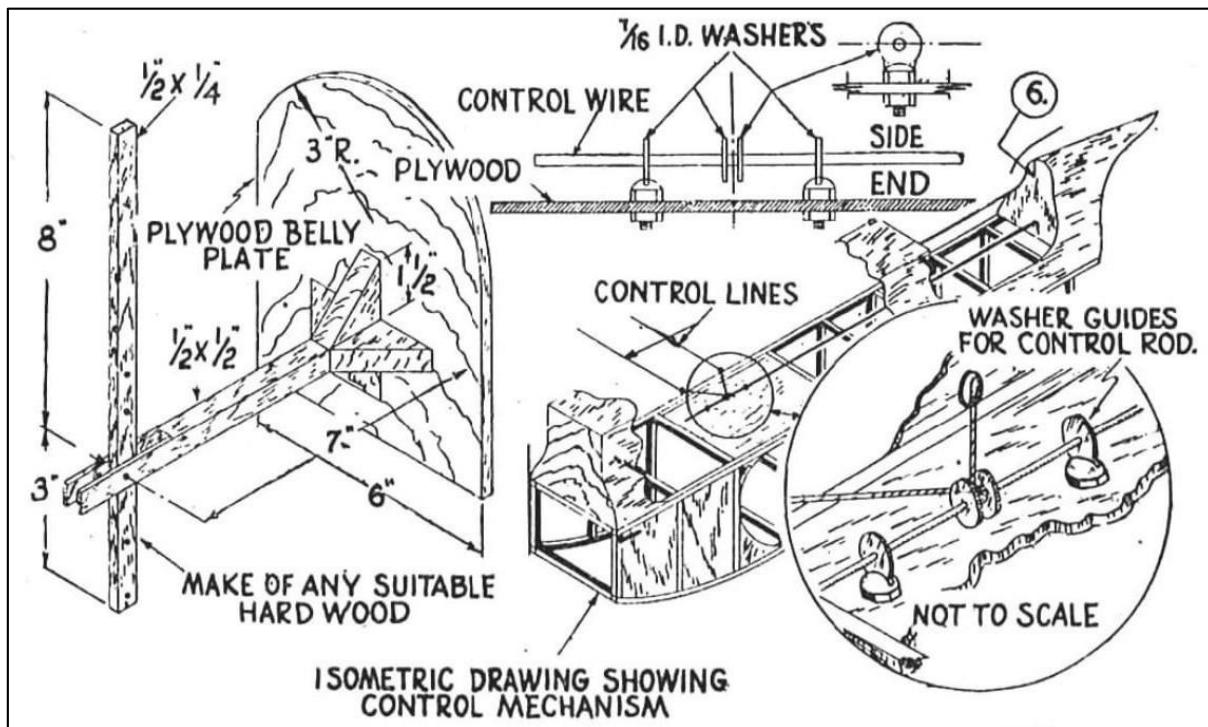
We connected it up, started the motor and let it run at half-throttle. Surprising as it was, the ship left the ground and flew in perfect circles at about 5 ft. altitude. When the motor cut we could keep the ship in the air long enough to bring it in and set it down next to the booster batteries and gas, by pulling on the string and kiting it in the air.

We kept flying for many months in this manner, until one fine day the motor was opened up just a little too much. There followed a crash!

We now fitted movable elevators - Wow, what a thrill we had in store for us, we succeeded in using two strings for up-and-down control of the flippers; these same two strings also supported the ship while flying in circles. These strings were connected to a small joy stick about a foot in length. The stick was made so we could strap it under our belt, leaving us free to walk about, and our hands free for controlling.

With this system, the ship about 30 ft. away, flying around the operator in circles, could be controlled perfectly. We could set the ship on the ground with the motor running and using the stick, raise the tail in flying position, pull her back and take-off exactly like a real airplane: climbing and diving the ship within a few inches of the ground and pulling her out without stalling or crashing in. We can truthfully say that almost any ship that will fly free can be adapted to remote control.





Recently we perfected a method by which we could regulate the speed of the engine, making it possible to throttle down and land, open 'er up and again take off, etc.

Here's how. Use an old 'Brown Junior' choke nut and slip it over the end of your intake tube. Solder a piece of 0.034 wire across the rear of the nut, to act as an arm to close and open the air. Solder a fine spring to one end of the arm, to bring the choke nut back to the closed position. To the other end connect ordinary sewing thread for the control line; run this thread through the necessary pulleys made from straight pins, bringing it out from the fuselage between the two elevator control lines. An extra throttle control arm can be screwed to the joy-stick support.

Metal tabs can be attached to the left wing panel and the rudder, set to bank and turn the ship to the left. The movable elevator can be made the desired width and connected with silk hinges to the present stabiliser. Connect up the rest of your ship in the same manner as shown in the drawings. The drawings are for those who want a real top-notch performer, one which has been well tested. If any of you want a ship that will really perform for contest or for remote control, this is it.

For control line, use two 30ft lengths of good-grade fishing cord, with about 15 lb. test pull. Take 2 ft. of this cord and determine the centre between the two small washers which are soldered to the control wire. Run each end through the eyelets out of the fuselage. When connecting up the control cords from the joy stick to the ship, run the cords for it through the wing cord guides, then tie them to the permanent cords from the fuselage, being sure that the bows (not knots) will not get caught in the guides when either of the cords is pulled.

Unless you have an exceptionally smooth place from which to take off and land, equip the ship with exceptionally large wheels. We found that 3-in. wheels enable us to take off or land on grass lawns under full power without nosing over.

**Joy Stick.** The belly plate is made of 1/4in. plywood, 6 in. x 8 in. The joy stick support is made of any suitable hardwood and is screwed to the belly plate and braced up with hardwood gussets. Slot out the front of the support stick to receive the joy stick. Cut the joy stick to shape and drill in five holes, one for the pivoting point and the others for control lines. You can use either the two outer control-line holes or the two that are closer together, depending on how much control action you want. When in use, the belly plate is strapped to the operator with his pant's belt. When not in use, the plate will serve as something to wrap the control lines on.

**Test Flying.** Test the flying on a calm day and keep the control lines from dragging on the ground, especially when the ship is released for the take-off. Have someone to hold the model up in the flying position, holding the elevators perfectly level and the joy stick perfectly straight. Then connect up your control strings, being sure that the tension on both strings is the same. Set the model on the ground, so that the ship is at 90deg angle to the lines.

No further meetings on which to report. On the contrary, the situation is worse in as much that we have suffered yet another month of lockdown resulting in zero flying & made even less tolerable by having to endure quite a few days of lovely weather! Things can only get better (one hopes)! The current lockdown expires next week & there has been a mention of outdoor sport being permitted again. We must hope that the BMFA can make the case for aeromodelling, as it has previously done.

Having stated that, we are now threatened in the South, with the potential loss of the old airfield at Beaulieu as a flying site, after some 60 years of continuous use. Why, you may ask? It seems we have a new local eco-warrior who is pursuing the cause of ground nesting birds to the potential detriment of all else, under the umbrella of the Forestry Commission. Her proposal, through the latter organisation, is for a 5 year ban on all activities that currently take place on the heath, inclusive of ramblers, cyclists, dog-walkers & of course, aeromodellers. No evidence has been tabled by way of statistics or data taken over time to prove the case. The issue is being resolutely fought by the local Beaulieu Model Flying Club, who are responsible for the issue of permits to fly & the assistance of the BMFA has been enlisted, but as yet the outcome is unknown. If the case is lost, then the only decent & relatively local site for free flight will be that of Area 8 on Salisbury Plain. As it stands, this proposal won't go down at all well with other users of the heath, so hopefully common sense can prevail & provide the basis of a solution.

On the home front, slow but steady progress has been made on the Red Raider - now covered & doped, awaiting the detail bits of RDT to be fitted after fuel proofing - maybe even a photo next month! Another Tomboy has been refurbed & fitted with RDT, as has a Bowden Humming Bird - now suitably equipped with a Mills 0.5. I can't say that I won't have anything to fly in 2021. Covering the Red Raider necessitated the use of my diminishing stock of precious Modelspan, however, it must be done. But it did bring on the odd touch of nostalgia remembering when I used to go to my local model shop & there was a stack of Modelspan at one end of the counter in a nice flat pile, sorted by colour. If my memory is anything like reasonable, I vaguely recall paying 3 or 4 old pence per sheet! Another bout of nostalgia occurred when sorting through plans that I have retained (the majority have gone to Derick Scott for scanning or whatever) & I came across a copy of the Ballerina, designed by Vic Smeed (I think for Davies Charlton) to coincide with the introduction of the DC Merlin. A dive into the engine box produced 4 Merlins, of which the best was selected, cleaned up & bench run. Guess what's coming after the existing backlog is completed? A bit of nostalgia is a wonderful thing!

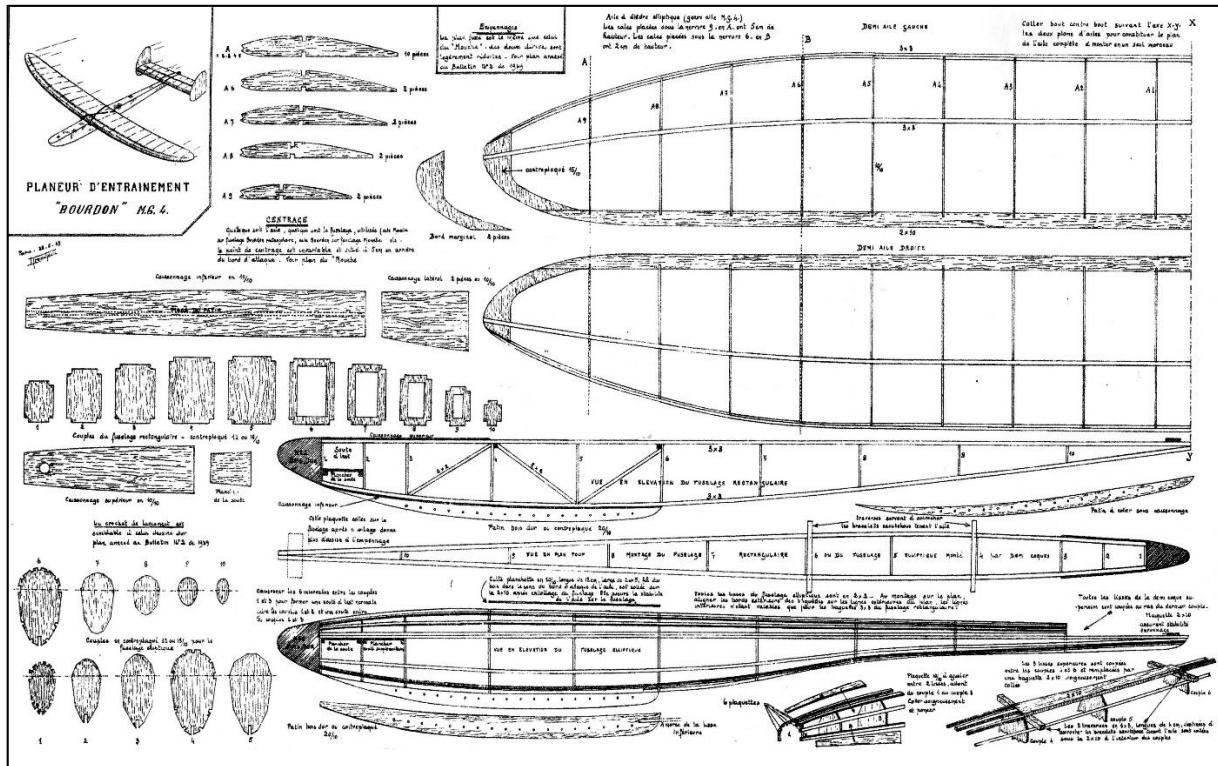


Finally, our long serving Treasurer has stood down after many years of diligent duty. Ed Bennett is deserving of our grateful thanks for looking after our slender finances so ably. Like all Committee members, he has given freely of his time for the good of our hobby, so Ed - have a peaceful & enjoyable retirement on behalf of all SAM1066 members.

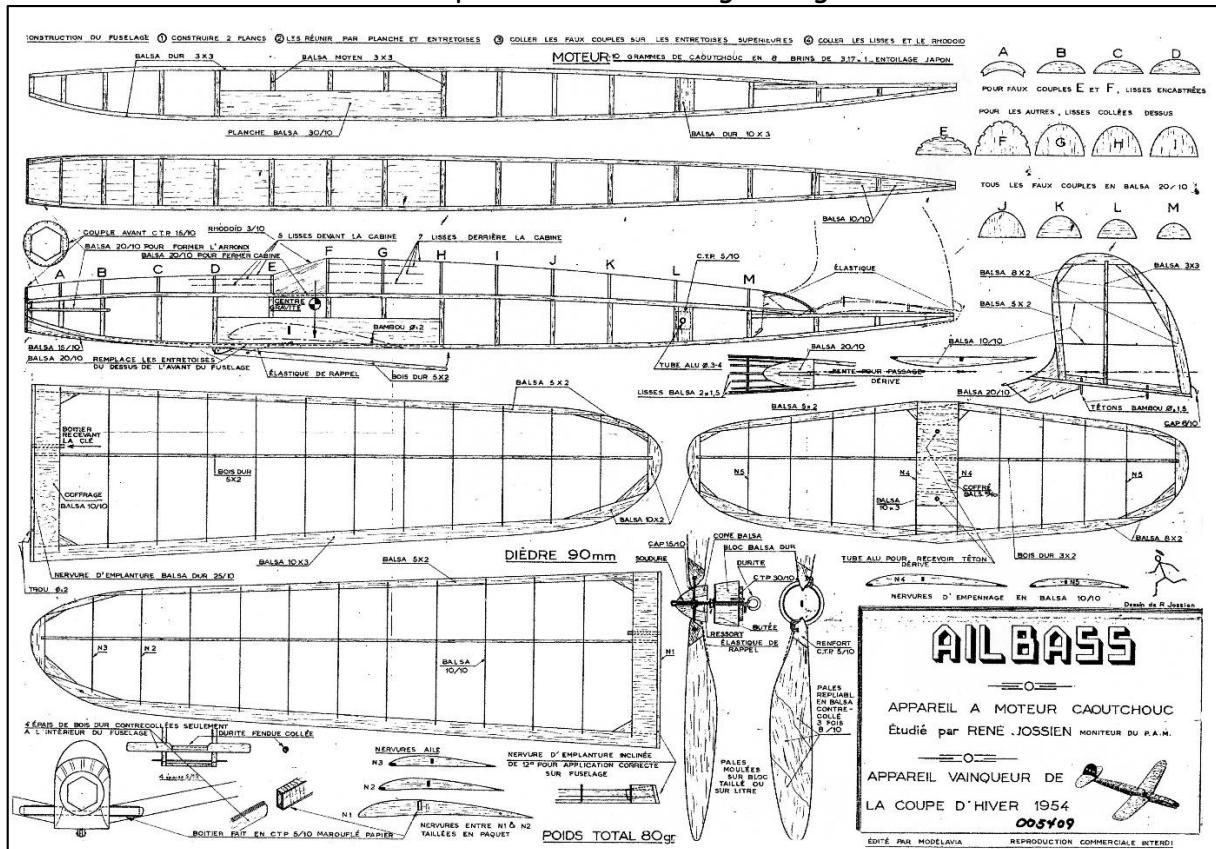
Nick Peppiatt has very kindly agreed to take on the role, which he will fulfil with admirable ease.

## Plans for the Month

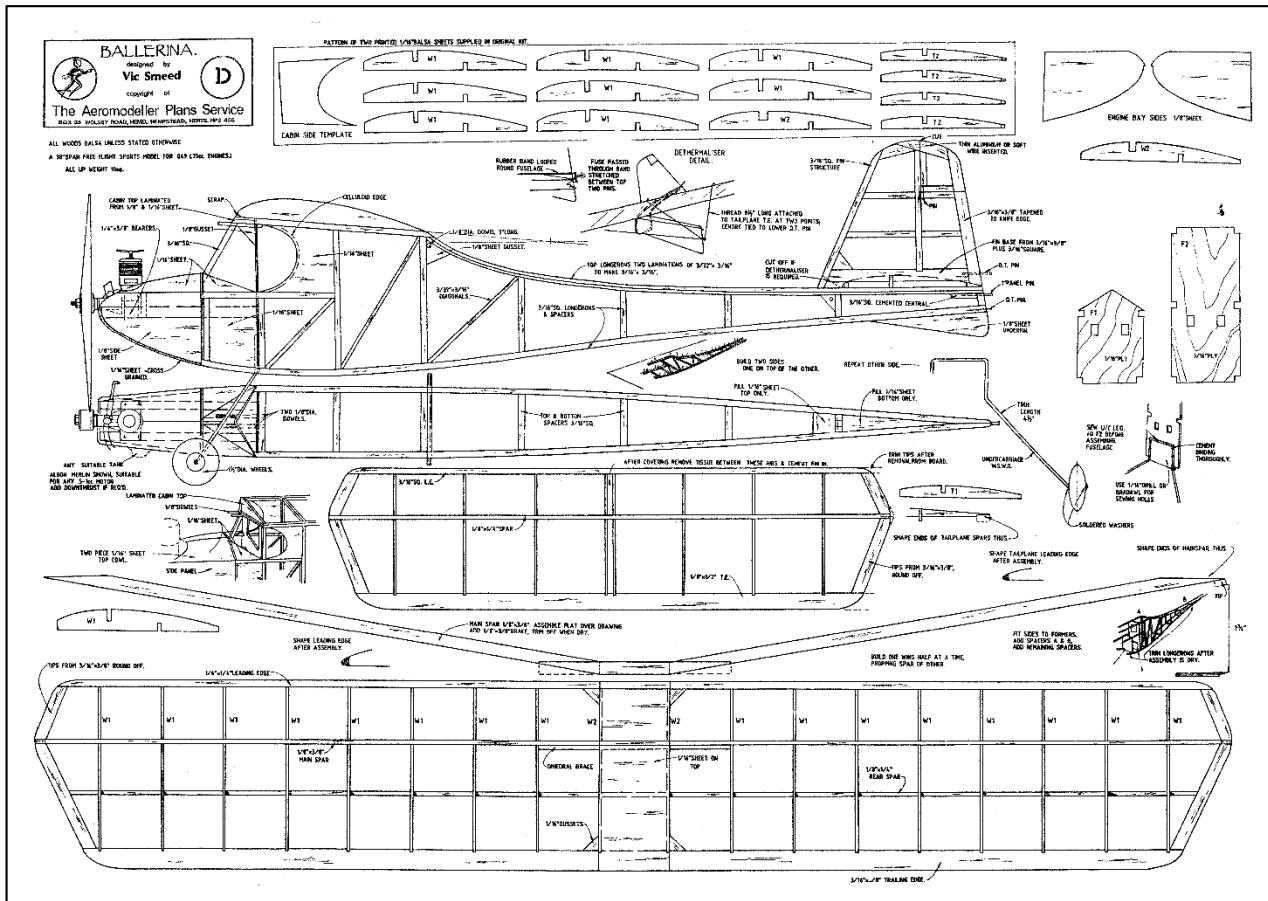
### Glider: Another small model from France - Bourdon



### Rubber: A rather unusual Coupe d'Hiver - low wing one again from France - Ailbass.



## Power: No question - has to be Ballerina!



Roger Newman

## 'Classic' A1 International Competition

- Stuart Darmon

## A Contest that won't get cancelled- hopefully...

After the frustration of the 2020 season, recent vaccine trials provide a glimmer of hope, but the first half of next season (at least) is still far from guaranteed. Therefore, in order to provide some opportunity for purposeful FF activity within the twin vagaries of Covid restrictions and the weather, the 'Birmingham MAC Classic A1 research group' has organised an 'email international' contest for the Classic A1 glider class, in which competitors can fly on a date of their choice between January 1<sup>st</sup> and July 1<sup>st</sup> 2021, submitting results by email (or post if they prefer).

In order to encourage participation, and hopefully confer a degree of prestige, high-value prizes are on offer; many thanks to the sponsors for their generosity.

**1<sup>st</sup>. Prize-** Complete stand-alone RDT system (donated by Peter Brown & Leo Bodnar electronics) plus trophy (hand-cut lead crystal champagne glass engraved with 'Classic A1 winner')

**2<sup>nd</sup>. Prize-** £50 voucher for goodies from Free Flight Supplies (donated by Mike Woodhouse)

**3<sup>rd</sup>. Prize** 12 month subscription to Aeromodeller magazine (donated by Andrew Boddington & Doolittle Media).

**Top junior** (aged 16 or under on the date of participation) will get an engraved glass trophy and a laser-cut Classic A1 kit.

And finally, '**Club team prize**' for highest aggregate score by three members of the same club, each of whom gets an engraved whiskey tumbler.

Entry is free, and welcomed from anywhere in the world - the dates are such as to give both hemispheres the chance of some decent weather. A few F.A.Q's before we get to the rules.

Q. Why Classic A1?

A. the models have a basic performance of 2 minutes or less and are therefore suitable for smaller flying sites. They are easy to fly but challenging to consistently max with. They are recognisable as duration models by followers of modern classes but also appeal to old-timer enthusiasts because of their traditional structures. Many are extremely simple and can be built in a few hours.

Q. Is there a minimum weight?

A. No. There was a wing loading (8g./sq. dm.) in the fifties but it was not felt necessary today, as very light models have negligibly higher performance

Q. Do I have to use tissue covering?

A. No. Structural materials not available in the fifties (carbon in particular) aren't allowed but non-rigid coverings like Polyspan & Mylar are fine. Turbulators are also allowed, as is any form of DT including RDT. No circle towhooks though, even fixed offset ones.

Q. Is there a catch?

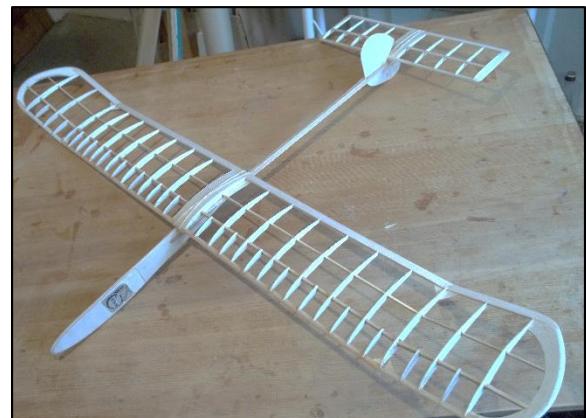
A. Nope. Entry is totally free, no data collection, no spam, just a model aeroplane contest and nothing else.

Email address for entries is in the rules below, but won't be checked regularly until the start date, so any enquiries or comments should go to:

[stuardarmon1a@yahoo.com](mailto:stuardarmon1a@yahoo.com) , or call Stuart Darmon on 01858 882057 (United Kingdom).

Those who don't use email can post their entry to 1, Post Office Cottages, Main Street, Theddingworth, Leicestershire LE176QP United Kingdom, but they must get here before July 07 2021.

Stuart Darmon



Typical 'Classic' A1 Gliders

## Classic A1 Glider Email International 2021

### Eligible Models

A Classic A1 glider is any Free Flight towline glider of total projected surface area not exceeding 18 square decimetres, built in accordance with a design published or kitted between January 1951 and January 1961, as per BMFA Classic Glider rules (<https://britishmfa.sharepoint.com/sites/public/Rule Books>)

Maximum length of towline 50 metres under 2Kg. tensile load

### The Contest

All flights for each entry must be made on the same day between 01 January 2021 and 01 July 2021 inclusive. All flights must comply with local regulations governing model flying and with the guidelines of the national aeromodelling governing body (BMFA, AMA, etc.)

All flights for each entry must be made with the same model. An individual may make up to three separate entries provided that each is made with an entirely different eligible model.

A model may not be used by more than one individual over the age of 16 years. Juniors below this age may fly a model borrowed from another entrant.

The maximum for the first flight of each entry is 30 seconds. If this is achieved, the entrant is permitted a second flight of maximum 60 seconds, and so on, the maximum increasing in increments of 30 seconds until either a max is not achieved, or flying cannot continue (e.g. because the model is lost or damaged). The score for that entry is the total flight time including the sub- max final flight.

All flights must be timed by a person other than the entrant. Procedure for starts, timing, attempts etc. is per F1H except that a flight aborted by RDT does not qualify for a second attempt, even if less than 20 seconds (in line with BMFA classic rules)

### Entry

Entry is free of charge. Once the flights are completed, entry is submitted no later than 07 July 2021 by email to [classical1postal@gmail.com](mailto:classical1postal@gmail.com) by sending the following information;

The name & contact email\* of the entrant

The name(s) of the timekeeper(s)

The score, in seconds, in the form of an addition, e.g.

$$30+60+90+120+124=424$$

The name of the model and where it was published

The country and location where the flights were made

If entrants aged 16 or under wish to be eligible for the junior prize they must include their age in years (D.O.B. not required). Juniors are also included in the overall results and are eligible for the other prizes.

In order to qualify for the team prize the entries of all three team members must be submitted in the same email, also stating the name of the team. Entries received in this way will also be included in the individual results.

Information about the flying, the site, etc. plus photographs will be very welcome and will help in reporting the contest in the modelling press.

**British Model Flying Association**  
**Scale Technical Committee**



## BMFA Scale Sessions on Zoom

Welcome to the BMFA Scale Session #10 on Zoom. Each session takes the form of an internet gathering and includes a formal presentation during the meeting.

Mike Stuart will be presenting "Introduction to Kit Scale"

For those of you new to Zoom, here are a few notes that may be of help.

- Zoom meetings can be joined on any PC or MAC and most Smartphones and Tablets. Each meeting has a Meeting Number and a Password, these are shown at the bottom of this page, and these are used when you select "Join a Meeting" on your Computer, Phone or Tablet.
- For PC and MAC users, you will need to first go to <https://zoom.us/> and select Join A Meeting, this will download a little program that is the Joining Interface. Once downloaded you will need to enter the Meeting Number and Password. There will also be the option of "Join with Computer Video" which you select YES to. You only have to download this once, next time you join a meeting it will automatically load.
- Once the details are entered you will be admitted to the meeting and you should be able to view the host and other participants on screen. Please ensure also your audio is not muted, this is a small microphone symbol on the bottom left hand side of the Zoom window.
- For Smartphone and Tablet users, you should download the Zoom App from the App Store or Google Play Store and the joining procedure is much the same.
- Your microphone connection to the meeting will be remotely muted by the host during the presentation, if you wish to ask any questions there will be an open Q&A session after the presentation.
- If you have a pair of headphones that you can plug into your device you may wish to use them. This is helpful if you have others in the room and maybe a TV on that others are watching.
- Please note the meeting will be recorded and be available for others to watch at a later date. If you do not wish to be recorded please let us know in advance.
- Times shown are BST (which is GMT + 1hr)

**The meeting will go live at 20.10hrs, the Welcome will commence at 20.30 sharp! This will allow 20 mins for everyone to join.**

**The Meeting Number:** 885 9654 0303

**Password:** 5544332211

**Times shown are BST (which is GMT + 1hr)**

## Grande Coupe de Birmingham

### December 2020

Given the current (as in mid-October) UK Covid situation the decision has been made to cancel this year's Birmingham Coupe event. Over half the UK faces some form of travel restrictions, even if advisory at the moment and the situation seems likely to get worse before it gets better. Given this it is felt inappropriate to hold a competition for the prestigious Aeromodeller Trophy this year.

If circumstances allow and a venue found the organisers will hold a competition on the 5th or 6th December. Classes to be decided but certainly to include:

**Vintage Coupe and F1G, Classic A1 and, likely, E36 & 1/2A  
combined, details will follow soon.**

**Gavin Manion [gavin.manion84@gmail.com](mailto:gavin.manion84@gmail.com)**

## BMFA South West Area

### Indoor Flying

organised by

**Cornwall Vintage Aeromodellers**

at

**Tregorrick Leisure Centre**

**Tregorrick Lane**

**St Austell**

**Cornwall, PL26 7FH**

**All meetings cancelled  
due to Covid virus**

Phone: David Powis on 01579 362951

Email: [dave\\_powis@hotmail.com](mailto:dave_powis@hotmail.com)

## FLITEHOOK

### Indoor Free Flight Meeting

West Totton Centre,  
Hazel Farm Road,  
Totton, Southampton.  
SO40 8WU

Contact: Tel. 02380 861541  
E-mail [flitehook@talktalk.net](mailto:flitehook@talktalk.net)

Café on Site

**Flyers £8**

**Juniors & Spectators Free**  
Flyers must be BMFA Members

**Sundays 10.00a.m. to 4.00p.m.**

**13<sup>th</sup> Sept. 2020      11<sup>th</sup> Oct. 2020**

**Further dates T.B.A.**

## Salisbury Plain Area 8. 2020.

Bids have been submitted to use Area 8, Salisbury Plain, for free flight, every Saturday and Sunday, plus 3 Bank Holiday Mondays in 2020.

At present these bids have been formally authorised until the end of March, although I do not anticipate there will be any problem with the later bids.

For those wishing to sport fly/trim, an annual permit must be obtained through:  
[donna@bmfa.org](mailto:donna@bmfa.org) for £20.

The terms and conditions remain the same as in previous years.

On contest days only, non-permit holders can sport fly/trim on payment of a site access fee of £5.

All flyers entering a contest must also pay the site access fee. This applies to Club Galas, Centralised, and Decentralised BMFA events. The exception to this is for BMFA Contest Season Ticket holders, who will not be required to pay the site access fee for BMFA Centralised events, and the World Cup events.

We have been politely asked not to create any new vehicle tracks on the area and to ensure that we stick to the established tracks when driving.

Most of you will be aware that part of the area was used as a film set in the spring of 2019. This has resulted in the access track being improved. The set was a French farm, the film is 1917, and will soon be showing at a cinema near you.

Peter Watson.

### Driving on Salisbury Plain.

We have frequently been reminded by the authorities that allow our access to Area 8 of,

The need to drive and behave safely, as it is a potentially dangerous place. Respect the environment, as it is a conservation area with numerous vulnerable species.

More recently all users of the Plain have been asked to avoid creating any new vehicle tracks.

The Salisbury Plain Military Lands Byelaws 1983, state that a driver may only leave the road (Public Right of Way), by 15 yards, and then only to park. For practical reasons, the interpretation of this can be somewhat liberal for our purposes.

Three farmers have grazing licences for Area 8, and an annual hay crop is taken from the plateau. Their rights and livelihoods must be respected.

This leads to the conclusion that vehicle movements should be kept to a minimum on grassy areas, and any motorised retrieval should be confined to the well-established tracks.

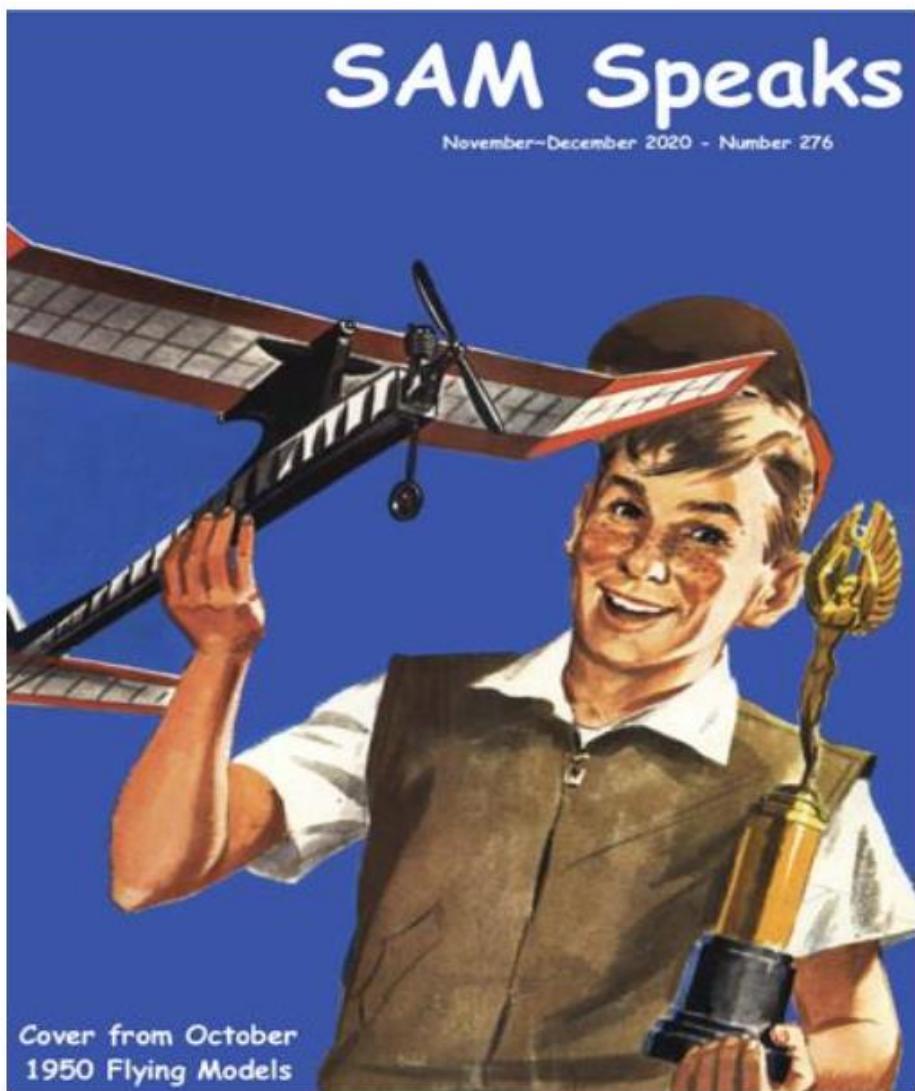
We never know who is watching our behaviour on any of our few remaining flying sites.

Peter Watson. FFTC Area 8 liaison.

## SAM Speaks USA.

This bi monthly emagazine can be obtained from the Society of Antique Modelers. Web site <http://www.antiquemodeler.org/> for the modest cost of \$30 pa.

Quite a few UK people already belong, but a few more might help our Parent Body!



## Free Flight Supplies

Michael Woodhouse

mike@freeflightsupplies.co.uk & <http://www.freeflightsupplies.co.uk>

Free Flight Supplies is still operating. I have made arrangements to both receive and despatch materials. If you need stuff I can supply, it just might take a bit longer to get things to you. Carry on building!

Stay safe and look after yourselves.

*We are only posting on an occasional basis. Any calls or e-mails asking "where's my order" will receive a curt load of invective from me or June.  
If you get June the reply will leave you stunned!*

## E30 Batteries

I have bought some batteries direct from China which are suitable for E30. They are labelled 75mAh. I have so far only had time to test three and I can report that they are all good and in fact give a better performance than any I have previously tried. If you send me £10 I will put four in a Jiffy bag and send them to you.

Ron Marking, Pros Kairon, Pennance Road, Lanner,  
Redruth TR16 5TF

## CARBON BOOMS For Hand Launched Gliders

If you need tapered carbon tubes for HLG booms I may have what you want. As supplied they are 99cm long, taper from 5.2mm to 2mm and weigh 6.4gm. As a rough test a 58cm length, suitable for a Yashinskiy type of model, weighs 3gm after a little application of wet-and-dry paper (used wet, of course) and it looks as if there's quite a bit more that can come off. The thin end that's left is good for a catapult glider.

Price is £7.00. In normal times I'd sell direct at contests, but postage and packing would be extra, depending on how many you need.

Contact Martin Dilly to order  
Tel: 0208 7775533 or e-mail [martindilly20@gmail.com](mailto:martindilly20@gmail.com).

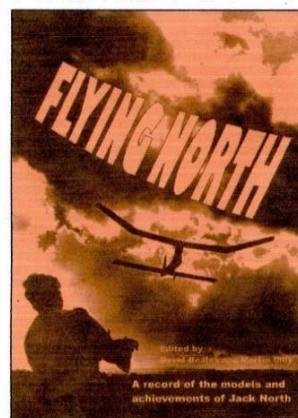
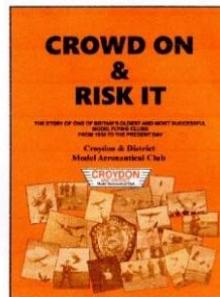
## CROWD ON & RISK IT

This is the story of one of Britain's oldest and most successful model flying clubs, Croydon & District MAC, from 1936 onwards. The club contributed much to aviation, both model and full-size, and the late Keith Miller compiled its history till around 1960. Now, this up-dated 73 page version of the club's history, copiously illustrated with many previously unpublished photos, takes the Croydon saga up to the present. Contributions by past and present members vividly capture the atmosphere of the heyday of free-flight, with almost weekly contests at Chobham or Bassingbourn.

53 designs by Croydon members have been published in the model press and 24 of its members have represented Great Britain in World and European Championship teams. Several have gone on to notable careers in aerospace. Crowd On & Risk It covers all this and more.

Just £8 by PayPal or cheque.

Contact Martin Dilly ([martindilly20@gmail.com](mailto:martindilly20@gmail.com)), phone/fax 020 8777 5533 or write to 20, Links Road, West Wickham, Kent BR4 0QW for your copy.



Flying North is a 163 page book covering the model flying career of Jack North, and including 23 previously un-published plans of his aircraft. Access to Jack's drawings and notes dating back to 1938 means that there are a number of designs in the book likely to be tempting to the nostalgia-minded.

Contact: Martin Dilly on 020 8777 5533 or write to: 20, Links road, West Wickham, Kent BR4 0QW or e-mail: [martindilly20@gmail.com](mailto:martindilly20@gmail.com)

The price in the UK is £18; airmail to Europe £20 or to anywhere else £22. Cheques should be payable to BMFA F/F Team Support Fund, in pounds sterling only, and drawn off a bank with a branch in the UK, you may also order by credit card, all proceeds help to fund the expenses of those representing Great Britain at World and European FF Championships

## DILLY JAP IS BACK

After a bit of a gap since the final 5 yards came off my last bulk roll of Japanese tissue several people have asked if it will be available again, so I've just received my sixth roll. Doing the sums, that means that there's now just under a mile of Dilly Jap covering models all over the world.

Anyhow, since the last roll came in 2015, the price is slightly higher (maybe as a result of you-know-what ...xit and its effect on sterling), but it's still only £13 for a five yard roll a yard wide.

To re-cap on the details, it's 12 gm/M<sup>2</sup> and has a strong unidirectional grain. It's white and low absorbency, so remains very light when doped. For those of you old enough to remember, it's identical to the Harry York tissue sold at his South London model shop in the 1950s. I normally sell it in rolls at contests, as it's a shame to fold it for mailing, but I can do that if you prefer.

I'm on 0208-7775533 or e-mail: [martindilly20@gmail.com](mailto:martindilly20@gmail.com)

### INDEPENDENT REVIEW OF DILLY JAPANESE TISSUE

The following appeared on the Hip Pocket Aeronautics Builders' Forum. Nine different tissues were tested, doped and un-doped.

"I am really impressed with how well this tissue performed. Dilly Jap tissue with 2 coats of thinned nitrate dope is around 8% stronger than the old 00 silkspan with 2 coats of dope, yet Dilly Jap is 0.09 grams per square foot lighter. Here are the test results:

Test#	Tissue Type	gm/sq ft	Avg Ten Str lb	Spec Str lb/gm
9a	Dilly Jap tissue (UD)	1.20	14.74	12.28
9b	Dilly Jap Tissue (D)	2.04	19.70	9.66

So far, the Dilly Jap tissue has the highest specific strength of all the tissues and silkspans tested. Doped Dilly Jap has nearly double the strength of doped Japanese Esaki tissue and yet doped Dilly Jap weighs 0.1 grams per square foot less than doped Esaki. Dilly Jap can't be beat for weight critical contest models requiring the torsional rigidity afforded by tissue papers!"

## FREE FLIGHT FORUM REPORT 2020

Warps - Right way? Wrong way? What way? -

Mike Woodhouse;

Moment Arm - A Novel Stability and Control Arrangement -

George Seyfang;

How Big Should I Build My Next Coupe? - Alan Brocklehurst;  
Scale Matters - Ivan Taylor;

Evgeny Verbitski - An Appreciation - by Mike Fantham, Ken Faux and Peter Watson;

Do Freewheelers Drag? - Spencer Willis;

The Hammer and the Feather - Aram Schlosberg;

The Performance of Rubber Motors - John Gibbins;

Gurney Flaps - George Seyfang;

Gyros in Free Flight Scale - Ivan Taylor;

A Glass Act - Russell Peers;

A Glider for Every Occasion - Stuart Darmon;

A Love Letter to the Free Flight Community - Bernard Guest.



The UK price is £12.00 including postage; to Europe it's £15 and everywhere else £17. Sales of the Forum Reports help to defray the heavy expenses of those representing Great Britain at World and European Free-Flight Championships. Cheques should be payable to 'BMFA F/F Team Support Fund' in pounds sterling, drawn on a bank with a UK branch; you may also order by credit card, which is a lot easier (and cheaper).

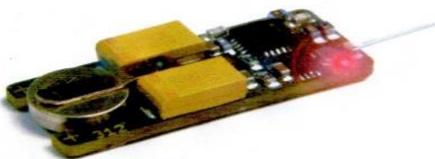
Copies are available from :

Martin Dilly  
20, Links Road,  
West Wickham,  
Kent,  
BR4 0QW

or by phone to: (44) + (0)20-8777-5533, or by e-mail to [martindilly20@gmail.com](mailto:martindilly20@gmail.com) .

# BUGS

## Free Flight Model Tracker



**£50.00** - each including 6 batteries

Ready to use radio tracker

Suitable for most handheld receivers

Powered by one 312 ZincAir hearing aid battery  
27mm long, 11mm wide, 5mm thick 3 grams  
including battery

Run time around 10 days

Red LED flashes when transmitting

Available in any frequency from 140MHz to 980MHz

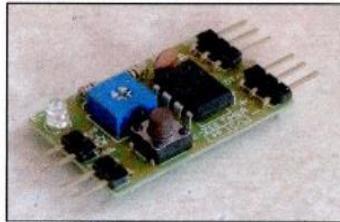
Supplied in protective heatshrink

Very quick delivery, often next day

On sale at

[http://www.leobodnar.com/shop/index.php?products\\_id=217](http://www.leobodnar.com/shop/index.php?products_id=217)  
or contact Peter Brown 07871 459291 for options

# E-Zee Timers



**E-ZEE FF Combined Electric Motor Power and Servo Operated DT Timer Type EFF 1**  
**Cost £15.00 + p & p**

This timer controls electric motor power and run-time (via an ESC) and after a further delay drives a D/T servo to terminate the flight. The motor power is set by a single turn potentiometer and the motor run and D/T periods are set by

a simple push button / LED interface

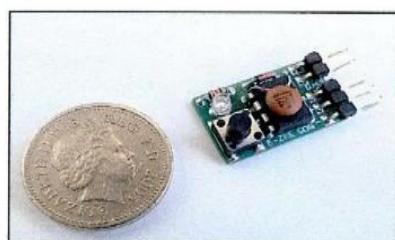
- motor run duration:-adjustable 1 to 30 seconds, set in 1 second increments
- d/t duration:-adjustable 10 seconds to 5 minutes, set in 10 second increments
- motor power:-adjustable at all times from zero to full throttle (by potentiometer)
- push button immediately stops the motor at any point during the flight profile
- duration settings are saved in memory a single button push serves to repeat a flight.

Length 30mm Width 20mm Height 11mm Weight 5gm

For installations where the timer is inaccessible remote pushbuttons and LED's are available

**Servo operated DT Timer only Type SDG 1 Cost £12 + p & p**

This timer was originally developed for use with 36 inch hi start classic gliders, but will be of interest to all sports free flight flyers not requiring electric motor control. The timer drives a D/T servo to terminate the flight, the D/T periods being set by a simple push button / LED interface. Driven by a small 30mAH battery and using a 2 gram servo the avionics can be used as nose ballast so there is no overall weight gain



- d/t duration:-adjustable 10 seconds to 5 minutes, set in 10 second increments
- push button immediately cancels the flight at any time
- duration settings are saved in memory a single button push serves to repeat a flight.

Length 22mm Width 13mm Height 11mm Weight 2gm

Timers are supplied with a comprehensive instruction manual and users guide

**E-Zee Timers have been designed and are manufactured in the UK**  
**Exclusively available from**

**Dens Model Supplies**

**On Line shop at [www.densmodelsupplies.co.uk](http://www.densmodelsupplies.co.uk)**  
**Or phone Den on 01983 294182 for traditional service**

### BMFA FFTC COVID RULES FOR COMPETITION DAYS

In order to restart the contest programme, it will be necessary to apply the following risk assessed measures to mitigate the spread of the Covid 19 virus. These measures will be monitored and amended as necessary

The following procedures and measures will apply to all BMFA free flight contests and all non BMFA (privately run contests) that take place on sites operated by FFTC, including but not limited to, Barkston Heath, North Luffenham, Salisbury and Sculthorpe

No person shall attend any contest or flying site if they are showing signs of Covid 19 or have been told to self-isolate or are required to quarantine in a regional lockdown.

All persons who attend the flying site and contest are required to register their contact details and BMFA number at contest control.

Where a site requires a gate, access point to be manned and a sign in is required i.e. Barkston Heath. The attendee must sanitise before and after touching any gates or barriers and use own pen to sign the site log.

#### **General**

Sites have their own Covid 19 risk assessments and measures in place to mitigate the risk. The following measures are additional and will run alongside any existing site procedures,

- The CD will have available at control suitable hand sanitiser
- The CD will at all times social distance from all persons at control and engage in frequent use of hand cleaning and or wearing of latex/vinyl gloves to reduce the risk of transmission of virus from score sheets etc.
- Competitors should only visit control as necessary for registration, entry, score recording, or information. Avoid forming any groups around contest control
- Travel to and from contest site All contestants and attendees should travel to the contest site in their own vehicles and only carry passengers who are from the same household bubble.,
- Entry to site to be in accordance with site specific rules,
- Parking, all vehicles should be parked to form a line leaving a clear space of 4 metres between adjacent vehicles (This will allow sufficient social distancing when doors are open for access and egress),

#### **Contest entry**

**All contests for the remainder of 2020 will be free of charge. no entry fee or site fees.**

(This will be reviewed for 2021 along with concessions for season ticket holders)

- Contestants will register with the CD, ensuring at all times a social distance from the control table (Self entry and recording scores Entrant shall only use their own pens)
- NO flight cards will be issued,
- All official flights and attempts will be recorded by verbal communication to the CD and or by themselves self-scoring on official score sheets (using own pen).

#### **Flying**

- All practice flying, and trimming must be undertaken at a distance from the competitors flying in the contest
- All competitors must position themselves to maintain a social distance of at least 2 metres from other flyers helpers and timekeepers.
- For events and classes where it is required to fly from a line or box The line and box will be of sufficient length and area to enable all flyers, helpers and timekeepers to social distance of at least 2 metres

#### **Handling**

Where possible models and equipment should only be handled by the owner and or a member of the same household bubble, In cases where it is absolutely necessary for another person to handle -models etc THE OWNER MUST FIRST SANITISE THE MODEL AND EQUIPMENT

The handler is advised to wear suitable latex/vinyl gloves and or sanitise hands before and after handling.

Glider (Towline) Specific This class of model generally requires the model to be launched by another person, the following should be adopted .

- flyer mount the model on a self launch devise,
- flyer to operate a self-launch procedure with model in own hands. This procedure is compliant with BMFA rules
- In the event the flyer requires another person to launch the model, preference is that the helper be a person from same household
- If this is not possible then the model should be made ready for flight by the flyer and attached to towline, placed on the floor or other safe place.
- The helper should only pick up and handle the model when a safe social distance is in place between flyer/helper. After handling the model, the model must be sanitised, and the helper must sanitise hands.
- It is essential that the flyer, before collecting the model after the flight, sanitises the model (taking suitable cleansing wipes and or sanitiser on retrieval),

#### **Timekeeping**

- The timekeeper must observe a 2-metre social distance from the flyer and others on the site
- Flight scores to be verbally reported or if self-recording use own pen and recorded on official score sheets (avoiding hand contact with score sheets),

#### **ADDITIONAL:**

**All On Site Should Avoid Forming Groups of more than 6 people in any one location and always social distance.**

All persons attending the contest whether they compete or not must sign in at control and provide BMFA number and contact details

ANY person who during a contest day displays symptoms of Covid 19 MUST leave the site immediately and inform the CD

The BMFA and the FFTC are committed to ensuring that all contests take place with the minimum of risk of contacting and spreading the Covid 19 virus

The measures outlined must be followed in full.

## Provisional Events Calendar 2020

With competitions for Vintage and/or Classic models

The published BMFA Freee-Flight Contest Calendar  
became active again on 1<sup>st</sup>.September.

Contests will conform to the calendar and will be run under the published  
BMFA - COVID CONTEST RULES - until further notice.

A copy of the rules is printed above

September 5 <sup>th</sup>	Saturday	Ad Hoc, R,G,P,E, Salisbury Plain
September 6 <sup>th</sup>	Sunday	Ad Hoc, F1A,B,C,Q, Salisbury Plain
September 13 <sup>th</sup>	Sunday	Crookham Gala, Salisbury Plain
September 19 <sup>th</sup> /20 <sup>th</sup>	Sat/Sun	Vintage Weekend, Old Warden
September 20 <sup>th</sup>	Sunday	BMFA 6 <sup>th</sup> Area Competitions
October 3rd	Saturday	Buckminster Gala
October 4 <sup>th</sup>	Sunday	Buckminster Gala
October 5 <sup>th</sup>	Monday	Buckminster Gala
October 11 <sup>th</sup>	Sunday	BMFA 7 <sup>th</sup> Area Competitions
October 17 <sup>th</sup>	Saturday	Croydon Coupe Day & SAM1066, Salisbury Plain
October 24 <sup>th</sup>	Saturday	Midland Gala, Barkston Heath <b>Postponed</b>
November 22nd	Sunday	Midland Gala, Barkston Heath <b>Cancelled</b>

Please check before travelling to any of these events.  
Access to MOD property can be withdrawn at very short notice!

For up-to-date details of SAM 1066 events at Salisbury Plain check the Website -  
[www.SAM1066.org](http://www.SAM1066.org)

For up-to-date details of all BMFA Free Flight events check the websites  
[www.freeflightuk.org](http://www.freeflightuk.org) or [www.BMFA.org](http://www.BMFA.org)

For up-to-date details of SAM 35 events refer to SAM SPEAKS or check the website  
[www.SAM35.org](http://www.SAM35.org)

## Useful Websites

SAM 1066	-	<a href="http://www.sam1066.org">www.sam1066.org</a>
Flitehook, John Hook	-	<a href="http://www.flitehook.net">www.flitehook.net</a>
Mike Woodhouse	-	<a href="http://www.freeflightsupplies.co.uk">www.freeflightsupplies.co.uk</a>
BMFA	-	<a href="http://www.bmfa.org">www.bmfa.org</a>
BMFA Southern Area	-	<a href="http://www.southern.bmfa.uk">www.southern.bmfa.uk</a>
SAM 35	-	<a href="http://www.sam35.org">www.sam35.org</a>
National Free Flight Society (USA)	-	<a href="http://www.freeflight.org">www.freeflight.org</a>
Ray Alban	-	<a href="http://www.vintagemodelairplane.com">www.vintagemodelairplane.com</a>
Belair Kits	-	<a href="http://www.belairkits.com">www.belairkits.com</a>
Wessex Aeromodellers	-	<a href="http://www.wessexam1.co.uk">www.wessexam1.co.uk</a>
US SAM website	-	<a href="http://www.antiquemodeler.org">www.antiquemodeler.org</a>
Peterborough MFC	-	<a href="http://www.peterboroughmfc.org">www.peterboroughmfc.org</a>
Outerzone -free plans	-	<a href="http://www.outerzone.co.uk">www.outerzone.co.uk</a>
Vintage Radio Control	-	<a href="http://www.norcim-rc.club">www.norcim-rc.club</a>
Model Flying New Zealand	-	<a href="http://www.modelflyingnz.org">www.modelflyingnz.org</a>
Raynes Park MAC	-	<a href="http://www.raynesparkmac.c1.biz">www.raynesparkmac.c1.biz</a>
Sweden, Patrik Gertsson	-	<a href="http://www.modellvanner.se">www.modellvanner.se</a>
Magazine downloads	-	<a href="http://www.rclibrary.co.uk">www.rclibrary.co.uk</a>
Aerofred Plans	-	<a href="http://www.aerofred.com">www.aerofred.com</a>
control/left click to go to sites		

### Are You Getting Yours? - Membership Secretary

As most of you know, we send out an email each month letting you know about the posting of the latest edition of the *New Clarion* on the website.

Invariably, a few emails get bounced back, so if you're suddenly not hearing from us, could it be you've changed your email address and not told us?

To get back on track, email [membership@sam1066.org](mailto:membership@sam1066.org) to let us know your new cyber address (snailmail address too, if that's changed as well).

P.S.

I always need articles/letters/anecdotes to keep the *New Clarion* going, please pen at least one piece. I can handle any media down to hand written if that's where you're at. Pictures can be jpeg or photo's or scans of photos. I just want your input. Members really are interested in your experiences even though you may think them insignificant.

If I fail to use any of your submissions it will be due to an oversight,  
please feel free to advise and/or chastise



Your editor  
John Andrews

Merry  
Christmas

