

Sticks and Tissue No 170

If you can contribute any articles, wish to make your point of view known etc please send to or phone 01202 625825 JamesIParry@talktalk.net The content does not follow any logical order or set out, it's "as I put it in and receive". Thanks to Mark Venter back issues are available for download from <http://sticksandtissue.yolasite.com/> Writings and opinions expressed are the opinion of the writer but not necessarily the compiler/publisher of Sticks and Tissue.



Weick W1A with CO2 engine photo from Pete Ziegler

Rubber power meeting at Gheid Airfield by Pete Ziegler

Finally !!! Last Saturday (24.7.2021) we had our first rubber power meeting in Switzerland after the cancellation of the last events because of Covid. Despite the not very nice weather forecast we were all looking forward to the event. We hadn't met for a long time, there was a lot to talk about, discover and chat about.

Moreover, it was the first meeting in summer. Normally we have our meetings in spring and autumn. But this time we had the chance to hold it in summer, as SG Olten (Gliding group Olten) was in gliding camp and we were again granted hospitality at their home airfield. At this point, a big thank you to the SG Olten!

At least the weather was not that bad. We had everything... it rained several times a day, but we also had sunny windows for our flights. And the model exhibition was set up in the clubhouse: Rubber engine and CO2 powered models, about 30 in number, with eleven participants a considerable fleet.

Furthermore, all three finished EKW C-3603 of our Cookup were on display together. Not only to see, but also to admire in flight and fly all three.

A thunderstorm then put an end to the flying, but the camaraderie was still indulged in in the clubhouse and then everyone slowly made their way home. Satisfied and with many impressions and ideas and - looking forward to the next meeting.



Bellanca



Bleriot XI



Bucker Bu-131 Jungmann



C36 Cookup



C-3603 C-516



C-3603 C-52



C-3603



CO2 engines



De Havilland Airco D.H. 4



Designer-model-builder



Farman Moustique



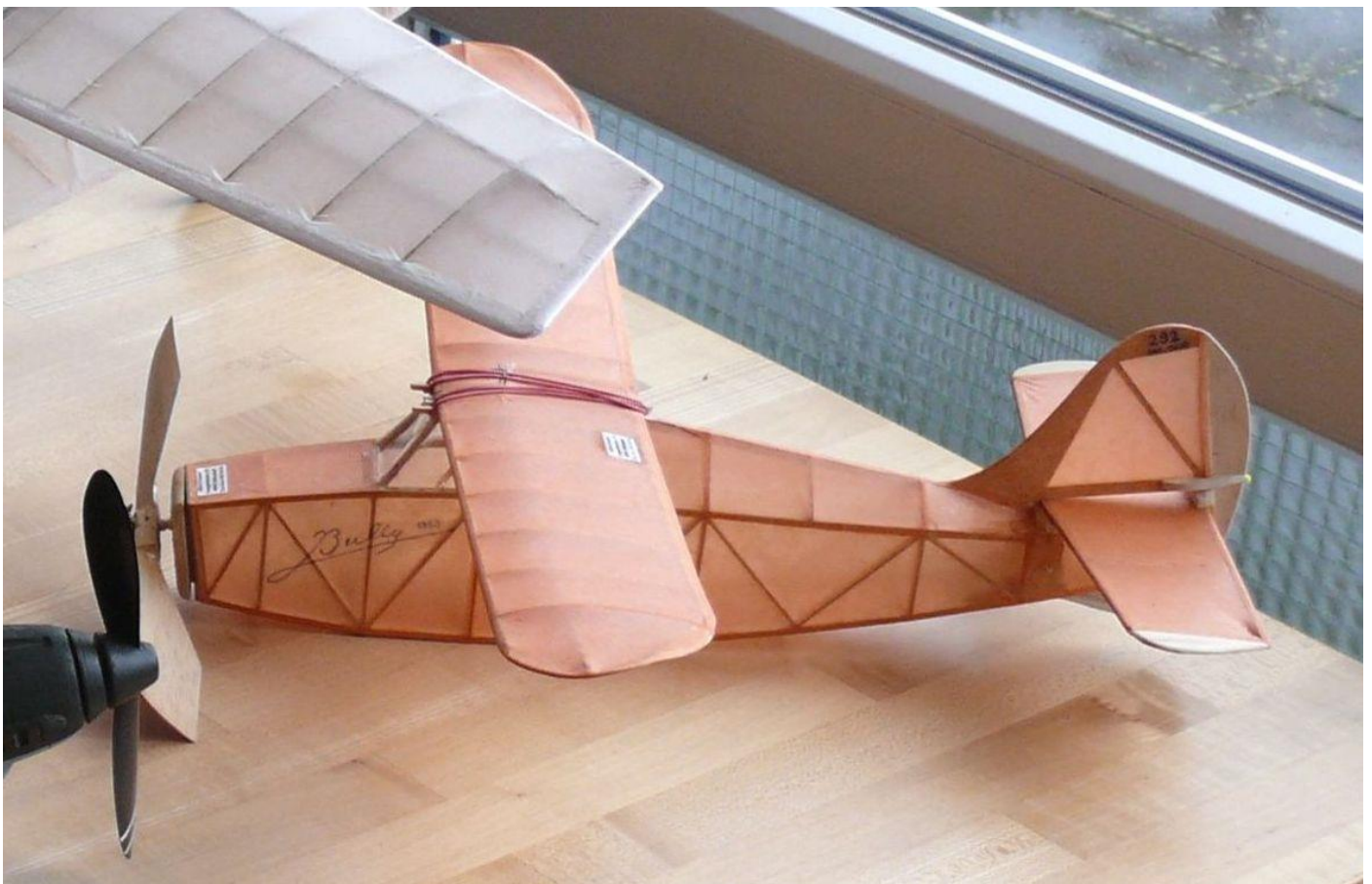
Fillon Wakefield



Flight in the rain



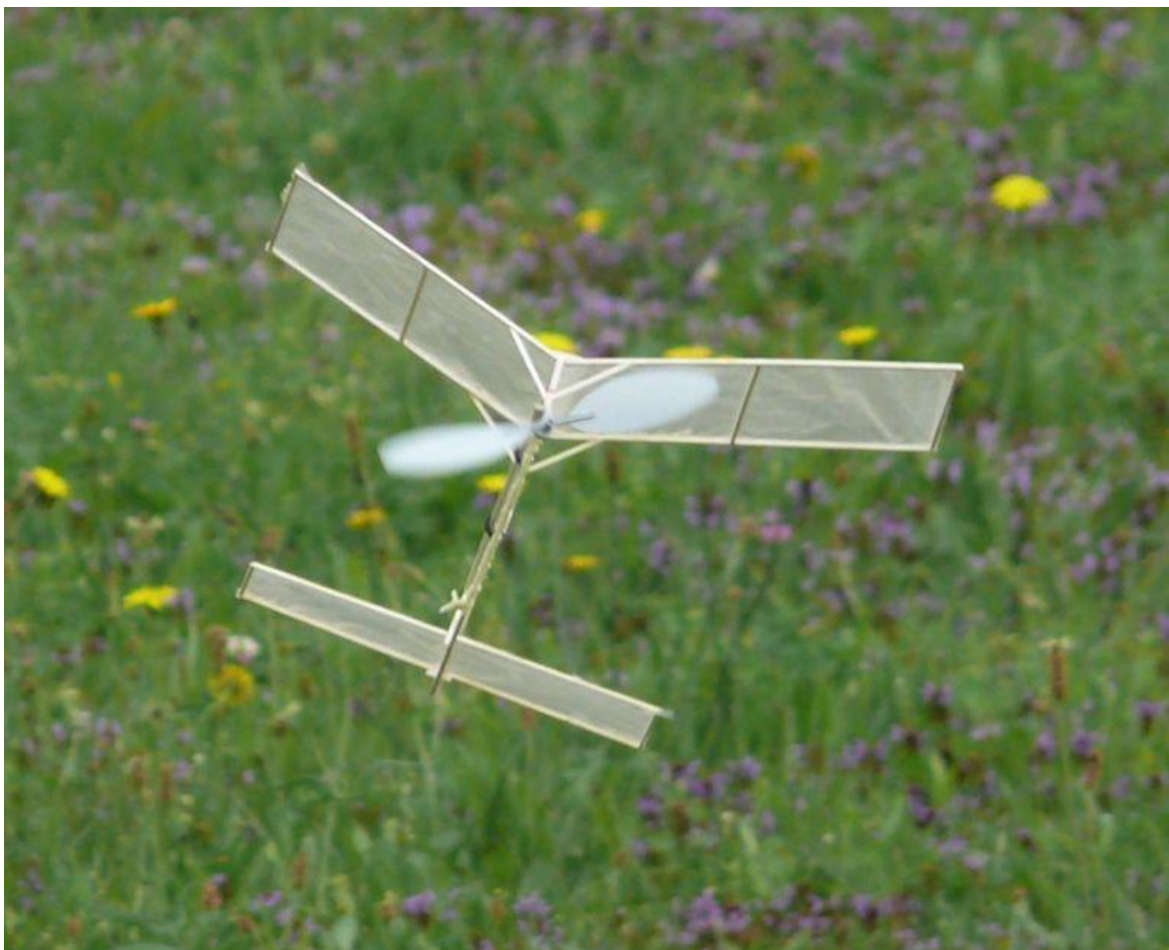
Frog Redwing



Graupner BULLY



Graupner Sternchen



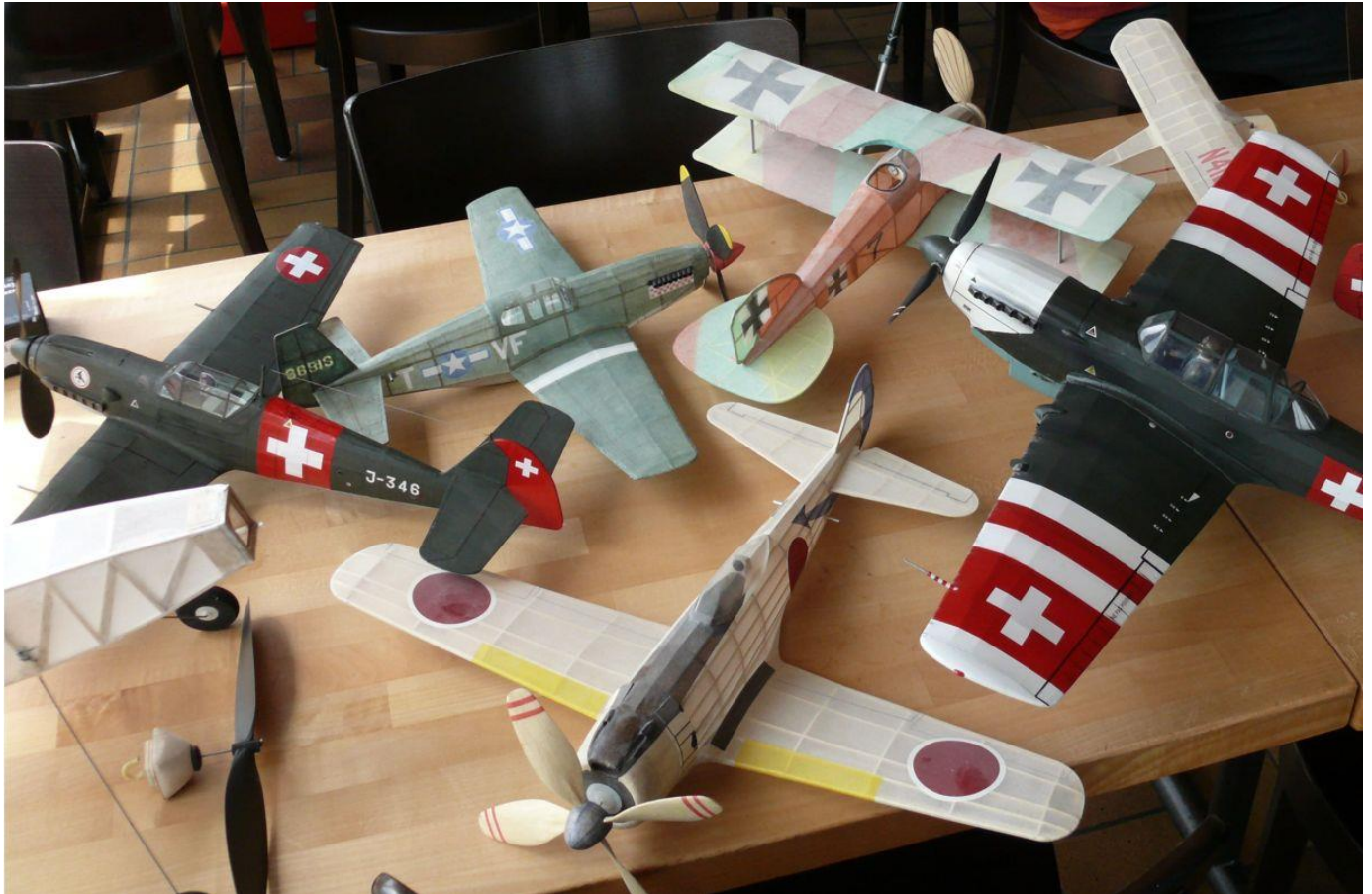
Hall flight outside



KeilKraft ACE



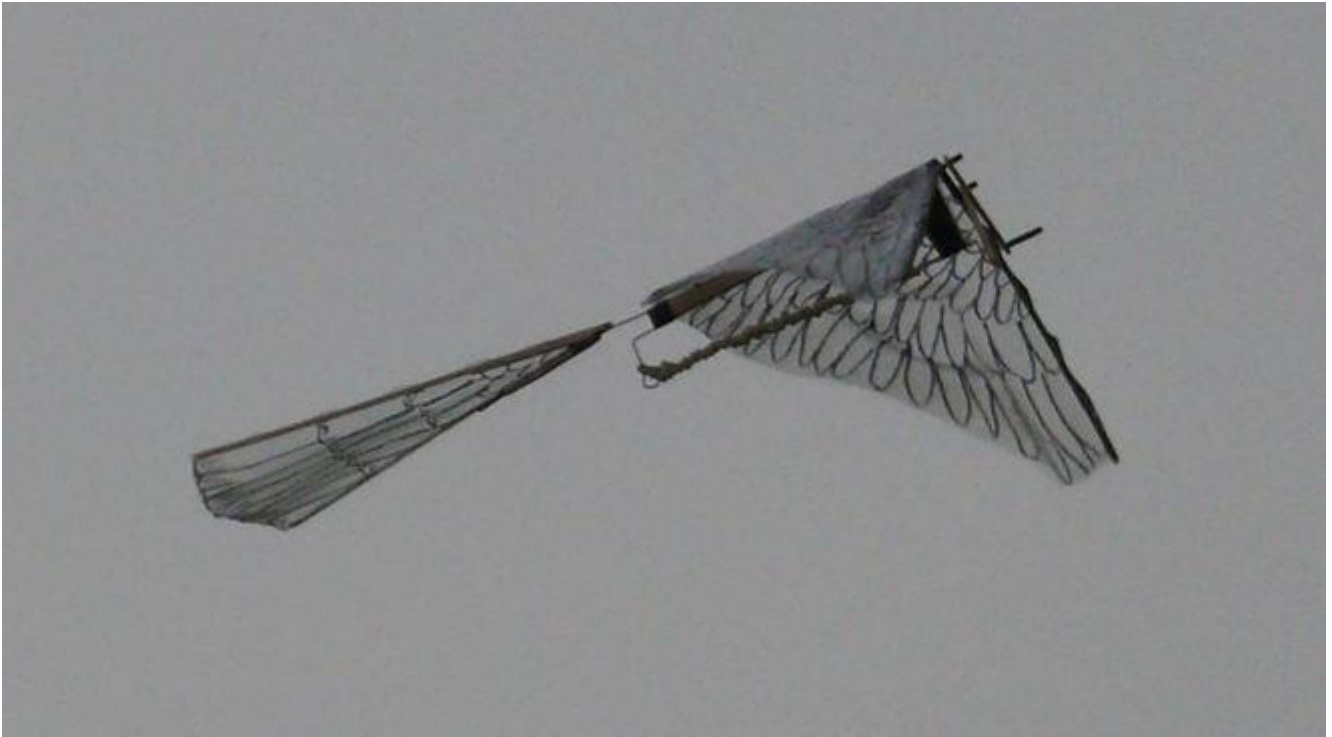
Miss Canada



Model exhibition 1



Model exhibition 2

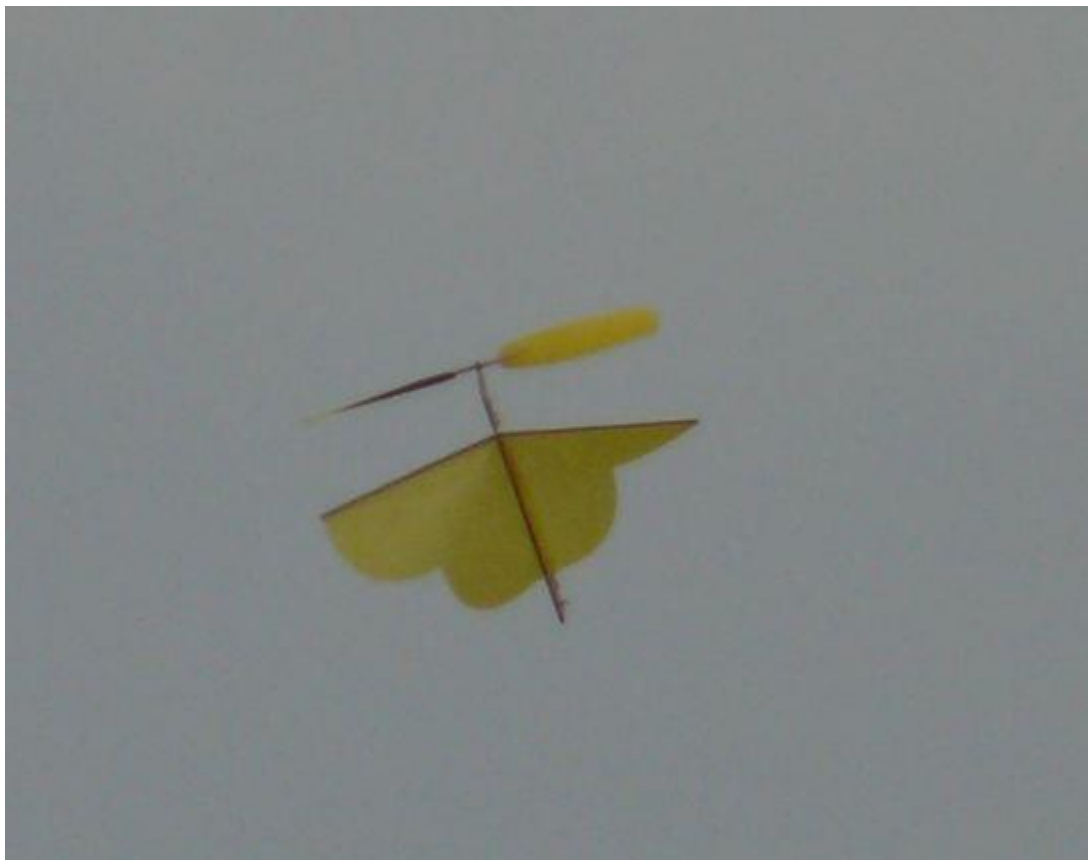


Ornithopter in flight





P-51D Mustang



Papillon



Piper Super Cub



Provide CO2 model



Puffin



Shortly after the start

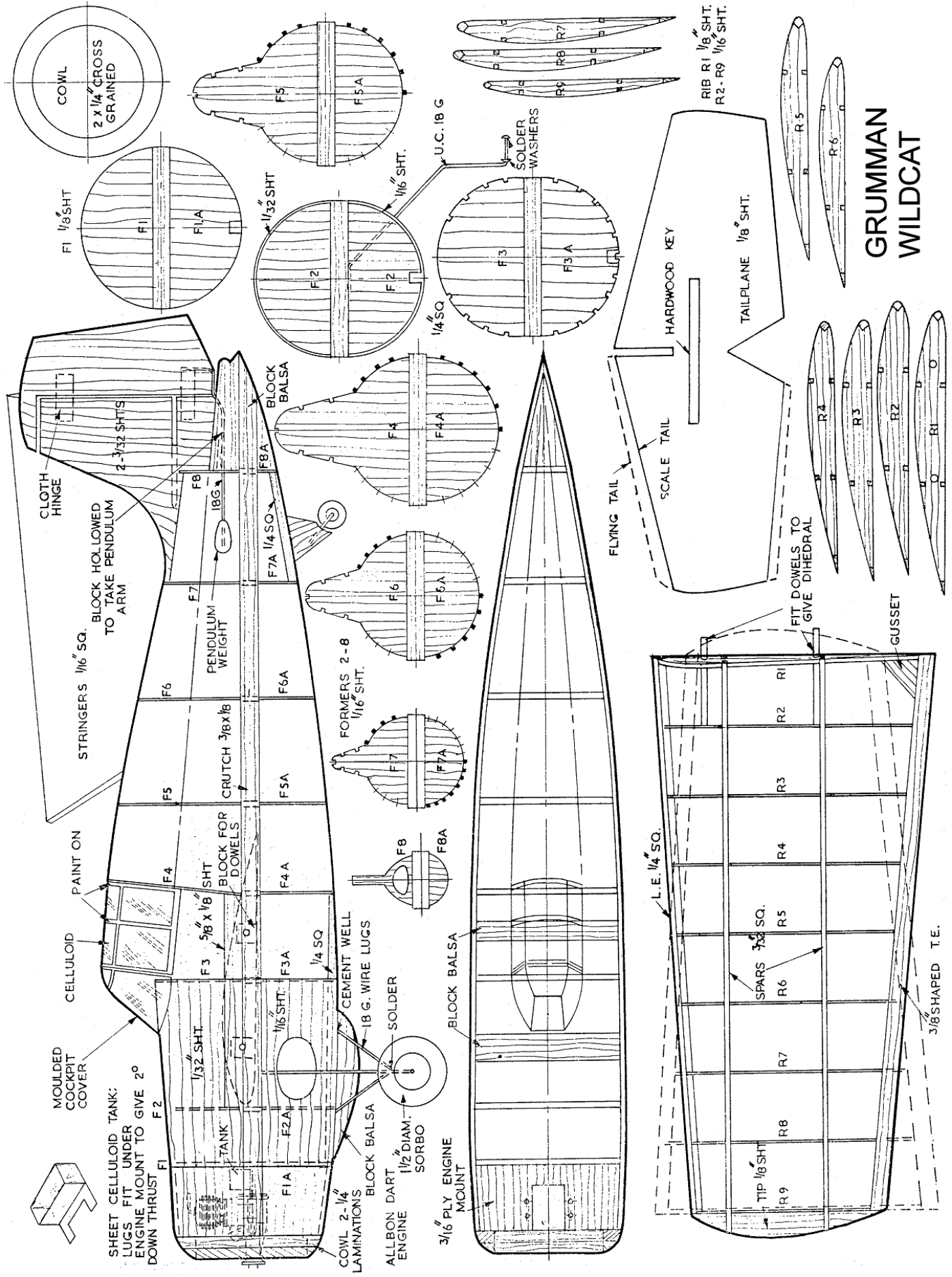


SPAD X is raised



Wiedehopf

Part 2 Report about the C-3603 Cookup with many more photos will be in the next issue



Grumman Wildcat by Eric Fearnley 29" span free flight scale model. May 1954 Model Aircraft

My first model in the World War II series was the most outstanding fighter Britain produced, the Hurricane. This one is probably the American equivalent—the Grumman Wildcat. For this stubby mid-wing job was, like the “Hurri,” in the picture wherever there was fighting, right through the war.



Its lease-lend counterpart, the Martlet, was with the Fleet Air Arm, in Malta convoys against the Italians, and the Germans, but it was against the Japs in the Pacific that it really went to town.

Eight of the twelve Wildcats on Wake Island were caught by the Japs in December, 1941, but the remaining four were kept flying by the Marines for a week against almost the entire Jap air force!

When the time for revenge came and Wildcats were carrier borne by the

thousand, the Japs were eliminated by the hundred in each fight. The famous battles seen on the TV series “Victory at Sea”

showed Wildcats in nearly every engagement in the Pacific. Such names as Midway, Guadalcanal, the Coral Sea bring to mind Avengers and Devastators, protected by Wildcats, always cutting a way through the “Zeros.”

The mid-wing layout gives a very flyable model. The only difficulty in having too small a tail for reliable stability has been overcome by an increase in area.

Fuselage

The construction follows the Hurricane, being 3/8 x 1/8 in. crutch with ply motor mount, and sheet formers added. The stringers are added on to the formers except where indicated, being notched in there. The front is sheeted in, and the wire undercarriage (slightly simplified in the model) added. The cowl is laminated from sheet, and should be well finished with sandpaper and filled with wood filler before doping.

Wngs .

These are as simple as possible, hut are nevertheless strong. Be sure that they are true, and mounted on the fuselage at exactly the same incidence if you are keen on seeing it fly.

Tail

This is of sheet, sanded to streamline section. Before cementing in place be sure that it is mounted at the correct line up as shown on the plans. Dope tissue over the tail to strengthen and fill in the grain, but avoid warps.

Heavy wheels are an asset to stability as well as appearance. Balance with plasticine until it is slightly nose down when balanced one third of the chord at the wing tips. The flight is lively, but stable, if trimmed properly. Take-offs are extremely realistic, followed by a rapid climb. Like the Hurri “it is suitable for flying in quite a small field, in calm weather. It is a tough job, the prototype

having withstood a full terminal velocity dive into a ploughed field during acrobatic flying. The dummy pilot shot through the canopy, but apart from a broken dowel, the model was flying again in a few moments.

Two last don'ts. Don't try a bigger motor than 0.5 c.c. and don't try test flights at full revs, as this

model is fully powered for a snappy flight, and power must be spared in the initial stages.



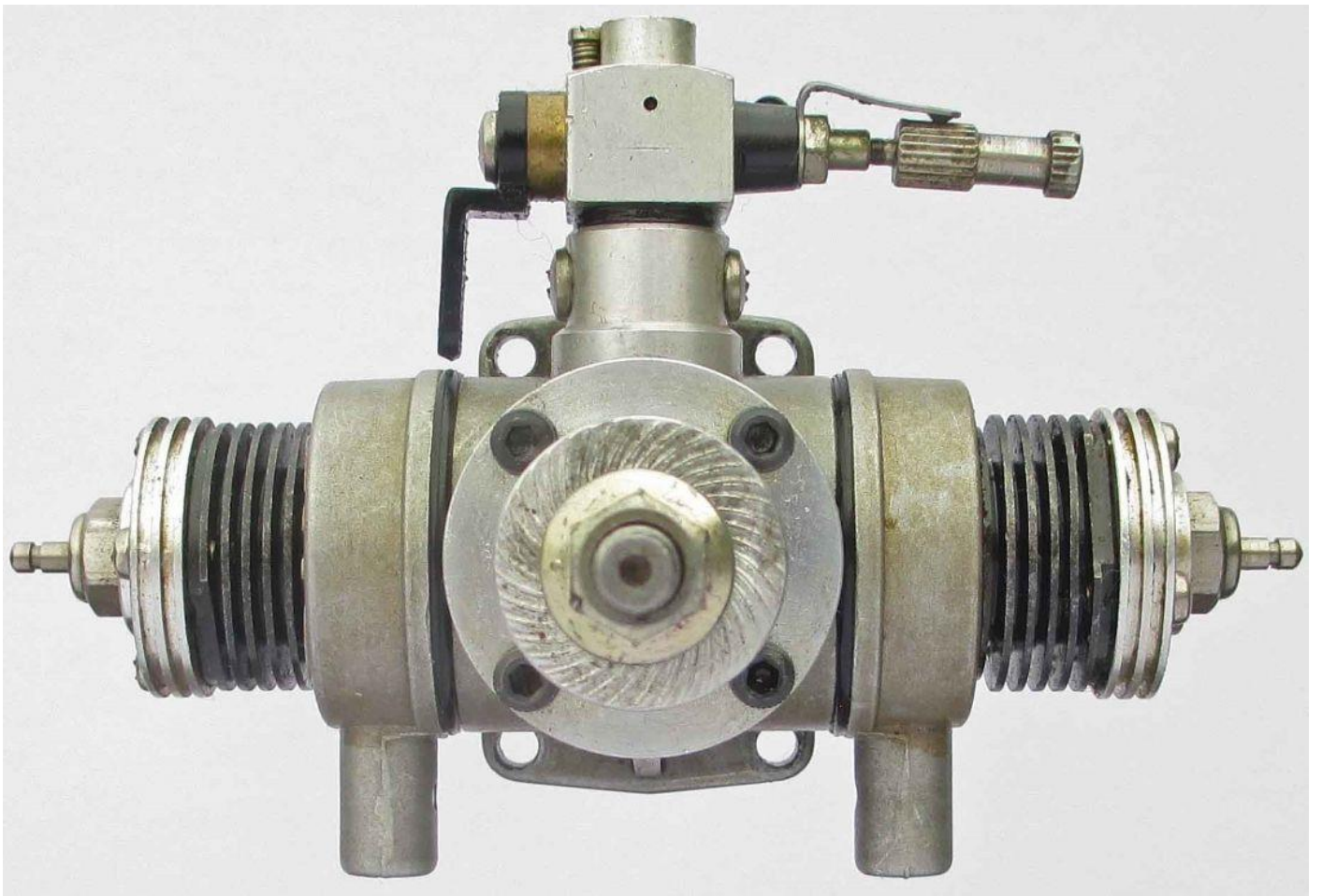
Bill Wells

G-Mark 0.12 Twin

This remarkable little engine was made in Japan by Kawaguchiko Seimitsu Co Ltd. Yamanashi otherwise reported as G-Mark Inc., Tokyo 101. It was just one of a range of G-Mark engines that appeared between 1979 and the early 1980s. The company seems to have disappeared as quickly as it arrived and not a lot seems to have been written about it. 'Ron's Model Engineering and Model IC Engine Projects' website has an article written about this engine. Or if you have access to Model Airplane News Vol 100 No 3 March 1980 page 42 there is a review by Peter Chinn.

I got this engine in a relatively clean state except it was locked solid. Now the problem was the mylar reed valve because heating the engine to release dried castor oil could easily destroy the reed. I took the glow plugs out and the RC carburettor off then popped it into the oven set at reglo 6. I was taking a risk but made sure it was only in the oven for a few minutes. With a pair of leather gardening gloves an old prop quickly attached a drop of light oil through each plug hole and a very gentle rocking of the prop and bingo it was free. I was very lucky the castor oil was just thick and easily released its grip when warmed! This engine like the Cox engines does not like the crank being turned if a piston is stuck. As the heating was quite gentle the reed valve survived. I had to take the carburettor apart replace the plugs and a general clean before I could have a go at running it. The exhaust collectors are really just that. OK they do muffle the noise a little but if the engine is mounted exhaust collector's outlets upwards they would collect liquid residue and clog the engine.

With the engine mounted on a block of wood held in a work bench I tried to get the engine to run. Absolutely no joy at all, but in fairness the problem was mine, not the engine. My main 2 volt battery was not chucking out the volts like it did 15 years earlier!!! I tried using it on one side and a freshly charged glow start on the other. The nearest I got to a start was a burbling like it was super rich. Apparently this is an indication that only one side is firing! I definitely needed to source a new battery. Good ole internet and I soon had 2 new batteries. I started with a small throttle setting but things were not good so with the throttle set wide open, sucking in while flicking and gradually opening the needle valve I soon had the engine running. After adjusting the slow running screw the engine throttled up and down OK. If the weight became a consideration there are plenty of single cylinder 2.5cc engines that are lighter and probably more powerful. The engine weighs 5.3 ozs which for 2cc twin is very acceptable and it would look great in a scale model.





Super Buccaneer A Great Flying Old Time Model from Jack Hiner

I got into R/C in the late 1950's while in high school. Receiver and transmitter had tubes. Receiver had a relay and an escapement moved the rudder powered by rubber. Boy, have things have changed in this hobby.

One fellow in the 1950's had a Super Buccaneer with single channel radio and spark ignition engine. Later he installed an Orbit 4 channel reed relay system for rudder and elevator. Changed the engine to glow with no throttle. A very good flying model.

This 1937 free flight design makes a good R/C model due to the low dihedral. Also it looks like a pre WWII observation or utility U. S. Army plane. Would make a colorful model with pre WWII markings.

More than a few years ago I was given a partially built Super Buccaneer. It was finished with electric power and the markings of a pre WWII Army aircraft. Rudder, elevator and throttle with steerable tail wheel. I have attached some photos.

I have flown it in Illinois where I live South West of Chicago. Also flown at the AMA flying site at Muncie, Indiana. Flown in Kentucky and Sarasota Florida where the photos were taken.

In years past I would go to Florida in January or February. There was a SAM old time model contest in the Winter near Tampa but no longer held. Also I have family in the Tampa area.

In the photos I am the tall one and the other fellow is Phil Semmer who lives near me in the Summer but spends most of the year in Sarasota, Florida. A couple years I spent some time at Phil's Florida home.

Sarasota R/C club has a great flying site. Also, Winter weather much nicer than Northern Illinois. After flying the Super Buccaneer for a number of years I gave it to Phil Semmer. Too many models for my apartment.







From Jürgen.

Hi James sending some Pic,s from my second outing after released from hospital still very weak and need of support. I brought my trusty old SWAMI electric easy to fly and very little support gear to carry around.





Hi James sending you two pic,s of a Tomboy 48 and a small Brigadier both build by me and given avey to my friend Lars in my frenzy to unload some of my stock. Jörgen.



Micron 5 from Bill Wells

Going back to Sticks and Tissue 168 and the Micron 5 article. First of all I would like to thank Brian Cox for the pictures showing the OWAT and Micron 5 differences and for sharing his expertise on these engines (issue 169).

When I started putting monthly engine pictures in Sticks and Tissue it was simply to add a bit interest to the various engines that modellers might have or once owned. Unfortunately, just a picture doesn't mean much so a few words of explanation or of the problems I had operating the engine seemed the way to go. I sincerely hope that you do not find my comments dogmatic or competitive in any way.

Dealing with a 70-year-old engine that may have had many owners and modification is not necessarily going to be straight forward. Apart from a few pictures I have not got the luxury of knowing the differences between an OWAT and a Micron. It would be nice to have an OWAT or to have even seen one, then I could have easily established the differences. So again, thanks to Brian for putting all of us right on the differences between these engines.

As regards the new and old metric threads (a bit academic) as the thread diameter had already been changed. Referring to my 1938 tables and formulae book the small thread sizes and pitches are likely to have a modern equivalent. Brian is right the profile is different. I suspect a previous owner had stripped the thread and replaced it with the next size up having a coarser thread which then fouled the backplate. Regardless, the point is, if a reader is buying such an engine look at these screws and see if the back plate has been damaged!

From Brian Austin

Retro Graupner Cirrus Build

About 3 years ago now, I was contacted by a fellow member of the Chelmsford Club, as to whether I knew anyone who might be interested in a Graupner Cirrus kit, circa 1969. Not sure as to how he came by it, only that it had been started by an Ex German POW, who had stayed on in the UK, after the war. He had been part of the service ground crew on the V2 rocket program, where his part in that probably led to him working for Marconi, in Chelmsford, until he retired. The kit had been started, which is not a good omen and in this case was very much the case, as those who recall the kit from the 60's may remember that the fuselage was a beautiful ABS plastic moulding, in 4 parts. The 2 front halves, in this case were missing, but the rear 2 were there and had been assembled. The tailplanes halves were built, as was the rudder. To those who may not know much about the Cirrus kit, it was very expensive in it's day. Looking it up from an old mag of those days it was £27. Interesting comparison to these days, a Kraft Radio would have set you back just over £300, where as today you can buy a radio for approximately £150, with some kits in that price range or more likely even more. Have had a look on the net and original Cirrus kits can fetch £250-£350!!

Nobody I knew, showed much interest in it (not many builders out there nowadays), so it languished in my model room under the drawing board, not knowing what to do with it.

The closing down as life, as we knew it due to the pandemic, led me to going through the kit box for something to do after finishing the Powerwagon, vintage model. It appeared that all the die cut parts for the wings were there, plus most of the sheeting, but not some of the spar, L E or TE strip. This was not really a problem as my stock of wood covers most items needed, or could be made from sheet.

But the fuselage was the big problem as to the missing front shells. On the off chance, I contacted an old/young friend, Paul Bardoe (known him since he was in short trousers). Asked him if he might be able to locate, the missing front ABS shells, from his many contacts in the trade. Two/three weeks went by, when he turned up with a complete fuselage, with the fin broken off, where it joined the fuselage. This then led me to tinkering around the broken fin, to remove the broken pieces and then reconstruct a new fin. So onwards and upwards as they say. Decision was made to electrify the model, although some said this was sacrilege, but there was no way I was going back to bungee's etc, to use as a pure glider. Plus in its original form, it was offered to be flown with a pylon mounted powered attachment. That did not look as tidy as mounting a small electric motor in the nose, which with a folding prop, would look far better than the pylon mount alternative. The kit in its day was very expensive, re other offerings at that time. It used ABS plastic for the root wing ribs and the tail plane root ribs as well. I was pleasantly surprised as to how all the pieces fitted so well to any wooden parts that mated with them.

So we came to the wing build, which is a large build, in that the span of each half of the wing is 1.5 metres, giving a 3 metre span model. Quite large for its day. Every spar L E & T E, needed the wood to be spliced to achieve the length required.

A decision had to be made as to fitting spoilers, or some way of landing the model, where you wanted it. I did go on the net in regards to the present uptake on the Cirrus, as to what other fliers have done. It would seem that ailerons, were a favoured approach, to give that crisp control, that we have become used to in present day gliders/electric models. That said, I did not want to go to fitting flaps as well, so wondered how to get somewhere near to a controlled approach setup. Spoilers did not sound right, so trying a different approach, as to using a Frize aileron set up. A Frize aileron, is used to cure aileron reversal, by having a portion of the aileron, projecting below the wing, when in the up position. So the idea is when up aileron is deployed on both ailerons, to give a crow brake position, there is a projected part of the aileron below the bottom surface of the wing, to add drag.

I have attached some pictures of the aileron build, showing this operation. Each aileron is to be driven by a mini servo, with the wires to them, passing through straws linked together, which run down each panel in front of the main spars. Not having built this type of model from the 60's for some time, brought back memories as to just how many pieces of wood there was in these type of models.

The canopy assembly, had been done, but posed a problem in as much as it did not fit correctly. The assembly consists of a ABS base, with front & back incorporated into the moulding. The canopy is then glued to the moulding. On offering it up to the fuselage, it did not fit correctly, being bowed in the middle of the base, so that it did not sit flat on the fuselage, plus the spring catch at the front, would not engage in its slot, to hold it down. Now this was a problem!! The canopy was a special piece on the Cirrus, being of a tinted blue transparency colour. Removing the canopy from the base, was far from easy and resulted in some bits being lost from the gluing area on the canopy. It later transpired that there are replacements that will fit, but not tinted. After re attaching the canopy, so as it fitted correctly, the areas that were now left, leaving parts that failed to match, were filled in with filler, with the intention to provide outline by using film .

A motor to power it was the next thing to source, but what to use. At a competition in April, I mentioned this to Colin Paddon, who came up with the solution in the form of XPower F2919/10 Light 83g 1480 RPM/V, available from Hyperflight. This is an In runner of 28mm diameter, no gearbox and the wire's exiting the back of the case. Perfect. The front was cut off to suit a 40mm dia spinner & folding prop assembly. This needed a bit of re working the front of the nose, as it is not round in section, at that point. A motor mounting plate was cut from fibre glass board, 40mm dia and glued to the front, then the nose area was built up with filler to fair into the mounting plate.

So that's where we are at the moment, with covering in progress and fuselage to be sprayed.

Pictures attached of Cirrus, at present stage of build.









We had a small get together a few weeks ago with seven turning up to fly control line. Loads of flying being done with Noshier aka Denis flying his combat models in preparation for a meeting along with Stew and Simon. Den of Den's model was there with Mick. Den was trialling a couple of models in particular a trainer model which is deliberately fast.





Den with model he was trialling



Den launching Mick's model



David Bintcliffe

Again a very nice completely calm morning at Longham

Weed seemed actually better...I first flew the Icon....noisy and no harsh. " G Forces" attempted ,after writing off Ken Spoke s Astrohog previously.

Then photographed Ken's beautiful Junior 60 ...this has safety switches for the radio and engine ...and (you have guessed...) I firmly pushed it thro the reeds/ weeds ,only to realise that I hadn't switched on the motor!

Well I didn't have to go in ...waiting and a long stick got it back!

Anyway the Junior 60 is a nice flying plane,it's only quirk is slow throttle up from the ESC ,being a technophobe, I will leave this as is !







COCKLEBARROW

VINTAGE RALLY



5th September 2021

All types of R/C up to 1975

BMFA insurance essential

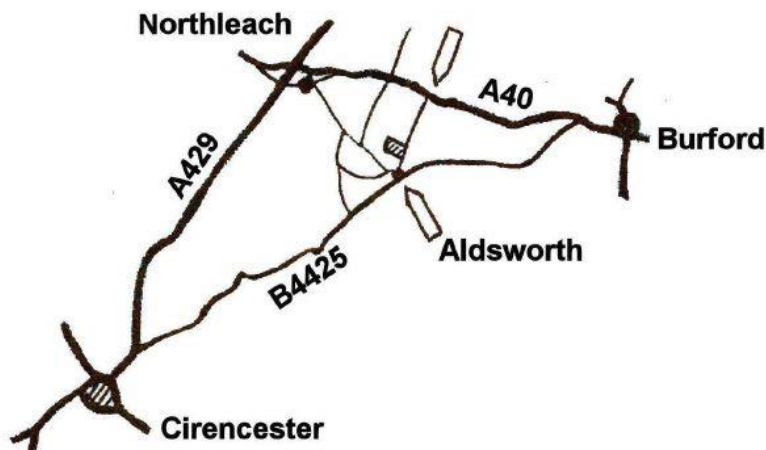
Camping on field (Basic facilities)

Contact - Tony Tomlin

02086413505 / email pjt2.alt2@btinternet.com / 07767394578

PLEASE RING BEFORE TRAVELLING DUE TO COVID 19

***Signposted from Aldsworth, Glos.off B4425 between Cirencester/Burford
and off A40 between Northleach and Burford [follow SAM 35 signs]***



**The What Three Words for Cocklebarrow Vintage are - positives arrival
calculate**

Peterborough Flying Aces Nationals SUNDAY 12th September 2021
at Ferry Meadows, Nene Park, Peterborough PE2 5UU .
Competitions 10.00 to 16.15

A NEW EVENT FOR 2021 !

Keil Kraft "Sedan" / "Rapier" / "Sportster", Nostalgia Rubber Duration Competition .

A rubber duration event for these great old KK designs:

Cash Prizes to 3rd Place! Model to be built to plan but plastic prop up to 6" dia. permitted

Plans available from Brian Lever blever@btinternet.com or 01733 252416

SCALE MODELS NOTE! ALL scale classes, except MASEFIELD Rubber Scale are judged for flight profile and realism by the Flight Judges. They may ask for some verification, so please have the plan or, if scratch built, the 3 view available on the field.

Masefield Rubber Scale- Any scale rubber model, to which **Masefield** type bonuses will be applied. **No flight judging**, just duration plus bonuses. Present model to control for processing.

Open Rubber /CO2 / Electric Incorporating KIT Scale Judged for flight profile and realism. Any C02 motor/tank permitted. See note re verification. Up to 36" Span. Judged for flight profile and realism. See note re verification

Jetex / Rapier/ EDF Authentic Scale Judged for flight profile and realism. See note re verification

Jetex/Rapier/EDF Profile ScaleJudged for flight profile and realism. See note re verification

P-20. 20" span and length. Max 8" plastic prop, 6 gram motors (may be external) .

Cloud Tramp 5 flights NO MAX. (best and worst times discarded, and the remaining 3 times totalled. Note! If fewer than 5 flights logged the best and worst are still discarded.

Frog"Senior" Rubber Duration (for plan see <http://www.houseoffrog.co.uk>)

VMC "PILOT" & KK "ROBIN" Rubber Duration. Senior and Junior Classes.

Models must use plastic prop and kit prop.size Note! We would like to see that any junior has had a hand somewhere in the building of the model.

Rubber Ratio: NO MAX. Any rubber powered model with wing span 15"- 25" (tip to tip).

(KK" Elf "is eligible). Flight score is total time in secs (for 3 flights) divided by span inches.

Catapult Glider: Catapult, max 2 grams rubber on a 6" max handle. This equates to a 280mm length of 3/16" rubber tied into a single (140mm) loop. Any model permitted.

TableTop Precision Precision flight time Rubber event - models must Rise off Table.

36 inch Hi-Start Glider Any glider up to 36", tip to tip, span launched by the supplied "Hi Start" bungee.

Best Unorthodox:Unusual models. Flight must be seen by the nominated Scale Judge

Open E20 Electric Duration Max length and span, 20 inches. Any motor, battery and timer. Max motor run 8 secs. DT and RDT permitted. Certificate for best "Ferry 500" Restricted Class model. (for rules see www.peterboroughmfc.org).

Rubber Scramble: 20 minutes, use any rubber powered model that qualifies for one of the above events. Competitor must both wind and launch, from box, but may use a retriever.

Flying Swarm Mass launch for any non electric model that is eligible for one of the day's competitions. Last model down is the winner.

Young Flying Aces;Prize for Best Junior: Scrolls for top 3 (Jun.17yrs or under on 12/09/21)

Prize for 1st place: **Scrolls** for 1st, 2nd and 3rd:

Bumper Raffle: Note: this is a Free Flight event: No Radio Control:

Proof of Insurance required for all flyers.

PLEASE NOTE ! NO GROUND PENETRATING STOOGES PERMITTED

Revel in the special atmosphere created at this unique event.

Toilets, Café, and Park Visitors Centre.

Contact Brian Waterland on 01778 343722 (07717 461000 on the day).

See also Peterborough MFC Website at www.peterboroughmfc.org

Note! Govt. and BMFA Covid restrictions applying at the time will be enforced.

Rev 3



Flitehook Indoor Free Flight

West Totton Community
Centre
SO40 8WU



2021 Dates & Times

**Wednesdays: 22nd Sept; 20th Oct;
24th Nov, 29th Dec**

12.00 noon – 4.00 pm

BMFA Membership mandatory

£8 per session

Easy access; Café; Toilets; Parking

Flitehook Sales Table

Spectators & Juniors are free of charge

Any queries – email rogerknewman@yahoo.com or phone 02392 550809



Supported by Southern Area BMFA





Belair Kits - The Name to build on ...



Blue Pants CL Stunt - Parts Set

Ref: ot-bpantscl

Parts Set for the Henri Stouffs designed Blue Pants

Includes all the balsa and plywood laser cut parts to build the basic airframe, fuselage sides, bulkheads, formers, wing ribs, tip shapes, tailplane and elevator, fin, bellcrank mount. Add your own stripwood or covering and the Parts set will save you hours of tedious hand cutting.

Parts Set suits only the original Aeromodeller plan sold by MyHobbystore - <http://www.myhobbystore.co.uk/product/20686/cl574-blue-pants>. Not included.

CL574 PANTS

By Henri Stouffs

Thick-wing stunt design flown to win the aerobatic class in the 1954 World (controlline) Championships at The Hague . Span 37in. For ED Racer or similar, our model uses a .19 glow.



Price: £45.00 Inc VAT
51.75 USD | 44.10 EUR

Jasco Trojan CL Parts Set

Ref: ot-jtroj

Parts Set for the SAM35 approved Jasco Trojan. Includes laser cut parts to build the basic airframe, fuselage, fuselage doublers, tail skid, wings, bellcrank mount, plywood fin, leadout guide, tailplane and elevator.

Plan available from SAM35. Additional builder supplied parts required to complete. Rules for Trojan racing are available from the SAM35 site.



Price: £35.00 Inc VAT
40.25 USD | 34.30 EUR

Lofty Lady Parts Set and plan
Ref: ot-loftlad

The Lofty Lady is a 52" span cabin model, originally designed as the smaller Loftie Lassie by Vic Smeed. The design has been redrawn by Andy Brough and is presented as a Parts Set containing all the shaped balsa and plywood parts, such as fuselage sides, wing ribs, tip shapes, bulkheads, formers, dihedral braces, gussets and many smaller items required to build the basic airframe. Builder to supply stripwood and covering. Full size plan included.

The Lofty Lady suits 1 to 1.5cc engines and single channel radio assist and is exclusive to Belair Kits.





Price: £45.00 Inc VAT
51.75 USD | 44.10 EUR

<http://www.belairkits.com/>