Editor: Andy Blackburn

Peter Smart's Pseudo Dime Scale RAF B.E.2.C. Rubber powered, he has no idea what it weighs but since it's only powered by a short loop of 1/8", it can't be very much [Photo: Andy Blackburn]

Contents

Parish Notices

Rules for Trinity

Those of you who didn't make it last Saturday are reminded of the Covid rules which remain in force for the moment; these are:

1. Face masks should be worn except when eating/drinking.
2. Please maintain 2 metres social distance, and 2m distance between tables.
3. Disinfect or wash hands after touching anything that's not yours.

Please try and fill-in the corners and short edges of the hall first so as to leave a decent unobstructed area for flying. For the moment, flying starts at 09:00 and finishes at 1:00; I'm hoping that the times might be extended and moved to a more reasonable start time later in the year, because I have to be up at 06:15 to make sure I'm there by 09:00…

Attendance

We only had 11 attendees at Trinity on the 24th April; I can think of several reasons for this (relatively short notice, lots of competing events when just out of lockdown, etc.) but John advises that last Saturday resulted in a net loss. This can be absorbed through past profits and contributions, but not for long. Please remember that Trinity is not a club-supported event, so if you can attend subsequent events this year then please try and do so.

Photographs…

We don't have much flying time at the moment so I usually can't get to see what everyone else is flying, there are therefore fewer photos in this issue. I welcome unsolicited photos and text from members, particularly if you have a new model.

Revised Trinity Competition Dates

After some consideration, we have revised the Trinity Competition schedule; the first few meetings have been left free-format to give people a chance to get back into flying, also because it appears that some people are – understandably – waiting for their second jabs before venturing out to mix with the public, so it was felt to be wise to allow time for that to happen.

Having said that, if enough interested people with Peanuts turn up, we'll have an informal Peanut duration competition, just for a laugh. CD will be either Andy Blackburn or Dave King.

Contributors

I should like to express my thanks to The Lurker, Colin Hutchinson, Dave King and John Winfield for their valued contributions to the Newsletter.

New Events Calendar

Date	Event	Contest Director
May 15th		
June 19th		
July 17th	Beginners No-Cal	Dave King
August 21st	Best Scale Model Non-Competition	John Winfield
September 18th	Battle of Britain Competition	Andy Blackburn
October 16th	Normal FF flying / RC Flying-Only TBC	Andy Blackburn/The Lurker
November 20th	Bostonian	T Calvert
December 18th	Christmas KK Elf	T Calvert/ The Lurker

Beginners No-Cal has been brought forward to make room for other events because No-Cals don't require a large time investment to build. The “Beginners No-Cal” rules are printed later on, but are basically standard No-Cal rules with 6” plastic props and a minimum wood size of 1/16” to give the less-experienced a decent chance.

The "Best Scale Model Non-Competition" is more of a display than a competition, there are no entry forms or anything, people just fly models as normal; John Winfield will look at scale models that are flown throughout the day and will award the prize to the one that looks the most realistic in the air. Let's hope that it's not a Lacey or something equally embarrassing... ☺

The Battle of Britain competition has been moved to Battle of Britain week to make room for other events, and this also seemed appropriate because of the historical resonance...

RC Flying Only is TBC because I need to discuss the published rules with some of the RC Flyers to see a) if enough of them want to do it, and b) if they think the manoeuvres are do-able – it’s supposed to be a bit of fun, so we don't want to present people with impossible obstacles.

The Bostonian competition is a late addition, Tony Calvert has graciously ~~been press ganged~~ agreed to look after it.

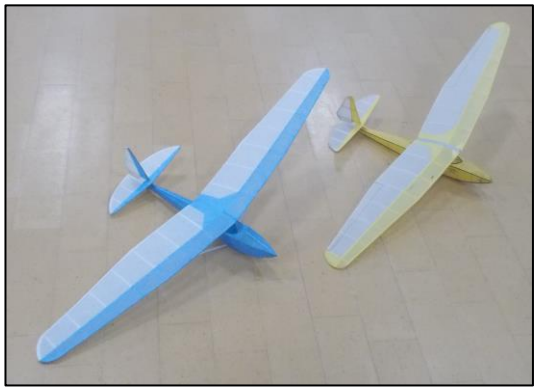
Finally, the Christmas Elf competition last week went well (and was quite good spectator sport) and all concerned wanted to do it again at Christmas.

Trinity Saturday 24th April

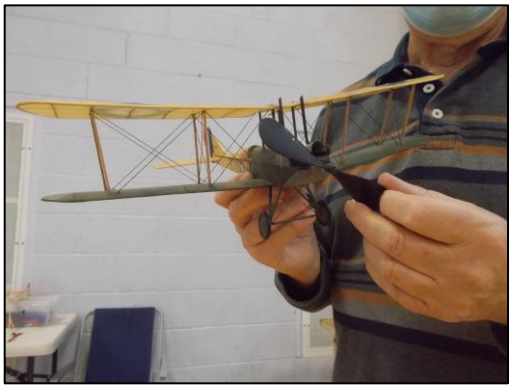
It was great to be back at Trinity, the temperature increased over the course of the day and I managed to get another few seconds from my Peanut. It's time I built another, though. Here are a few photos:

Mick Langford's Scrappee indoor RC trainer from Micro Aces; nice little printed-depron model that flies well [Photo: Andy Blackburn].

Peter Smart's Junkers F.13 own design Miami Peanut (9" fuselage length) [Photo: Andy Blackburn]

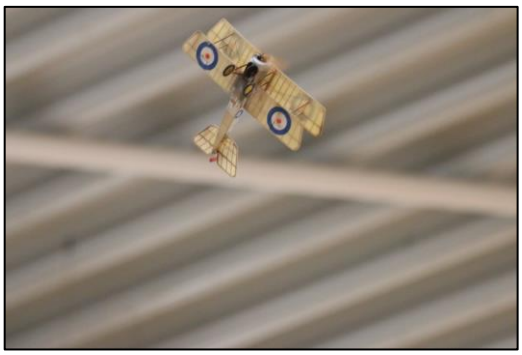


Peter Smart's original Willow Wren on the right, with The Lurker's blue example on the left [Photo: The Lurker]



Peter Smart's really well-executed Dime Scale B.E.2.C - an excellent flier [Photo: The Lurker].

The Lurker's Willow Wren being winched by Peter Smart [Photo: Andy Blackburn]



Peter Smart's Bristol Bullet – flies fast, difficult to follow [Photo: Andy Blackburn]

Trinity Spring Elf Results – The Lurker

[The Lurker generously donated the prizes for the first 3 places – well done, that man! Ed]

Colin Hutchinson - 1st [Photo: The Lurker]

Dave King - 2nd [Photo: The Lurker]

Tony Calvert - 3rd [Photo: The Lurker]

1st ColinHutchinson, 127 points
2nd Dave King, 98 points
3rd Tony Calvert, 96 points
4th Tony Winfield, 80 points
Retired, damaged. Paul Eggleston

Pilot : Colin Hutchinson

Flight Nº.	Duration (s)	ROG (+10)	3 Point Landing (+5)	Total
1	34	----------	5	39
2	40	----------	5	45
3	36	----------	5	41
			Overall	125

Pilot : Dave King

Flight Nº.	Duration (s)	ROG (+10)	3 Point Landing (+5)	Total
1	26	----------	5	31
2	27	----------	5	32
3	20	10	5	35
			Overall	98

Pilot : Tony Calvert

Flight Nº.	Duration (s)	ROG (+10)	3 Point Landing (+5)	Total
1	21	10	5	36
2	50	10	----------	60
3				
			Overall	96

Pilot : John Winfield

Flight Nº.	Duration (s)	ROG (+10)	3 Point Landing (+5)	Total
1	24	10	----------	34
2	31	10	5	46
3				
			Overall	80

As you can see from the score sheets, had John Winfield & Tony Calvert tried for a 3rd flight they may very well have made the podium.

Two or three of the entrants had trouble getting repeatable flights. From determined ear-wigging of chats between Andy B. & Paul E., it seems quite likely the problem is the Elf's small nose-block; it doesn't take much to loosen it off wrecking any hopes of consistency. As Tony C. has proposed (all being well) that a proper Xmas Elf competition be held in December, you may want to bear this in mind if you build one.

Unsurprisingly, correct choice of rubber proved important. Dave King had trimmed his outside with 1/8" strip, but this had his model in the rafters and he had a little trouble hitting on the right motor for indoor use.

The Elf Wot I Built – Colin Hutchinson

Photo: Colin Hutchinson

A few words, (after the immortal Ernie) about the Elf, wot I built!

It was all very simples really. I downloaded the plan from Outerzone, and printed it out twice. Then I set about cutting out formers and ribs from the second plan,

and attached them to the balsa with a light coating of Spray Mount. I then stripped lots of wood for the stringers and spars from light sheet.

The next part is fairly routine, building the fuselage sides over the plan covered with plastic sheeting, fitting in the cross members, and trying to make sure it was not a banana!

Wings are built over the plan, and also the tailplane and fin. Fitting the nose block and prop assembly needs to be done with care. I managed to sand far too much downthrust into the nose, and had to add bits of balsa to straighten it. Covering with John Hook's finest light tissue, water shrinking and light doping, all fairly standard.

Photo: Colin Hutchinson

Flying needed the usual careful approach. I can't remember anything about the motor size, but length is 1 ½ times the fuselage. I always start with too much left turn, only a few turns, and a very low launch, just so that I can avoid the walls, people and the hard bits in a hall that move into the path of your best new model!

The second or third flight showed a good reliable turn, but had a steep-ish climb and a stall on the glide. So a bit of real Plasticene was added inside the nose and a sliver of balsa was added behind the top of the nose block. This worked well at the time, but on Saturday I shaved a sliver off the downthrust as the plane was not climbing. This I did by scraping a scalpel blade over the inserted piece of balsa.

On 900 turns the Elf, from a hand launch, flew for 34 seconds or so, and on 1100 for 40 seconds, but was quite close to the ceiling. I could hear Peter Smart who was timing saying, "Stop climbing, no higher".

Tthe only way I can improve the times would be to fit bigger wheels so that a ROG can be achieved. Great fun, and thanks for organising it all. Oh, and the Tunnock's Teacakes were yummy!

Trinity Beginners No-Cal Rules – Dave King

[The next competition at Trinity is in July, for No-Cals. We've come up with the following set of rules that we think will probably give beginners a fair chance without advantaging very low aspect-ratio models, which is what would happen if a minimum weight was specified. Ed]

The competition is open to recognizable profile scale models of full-size aircraft. Changes from the previous issue of the rules are **in bold**.

A. Design Considerations:

1. Wing span: 16 inches maximum.
2. Aircraft with fixed landing gear must have each landing gear represented as per the original subject. Models of aircraft with retractable gear may be depicted with the gear retracted.
3. All wing struts must be on the model.
4. Motor sticks/tubes shall not exceed fuselage or engine nacelle length, however, the prop may be positioned at the tip of a scale profile spinner if the real aircraft featured one.
5. For single-engined models, the propeller must be **any commercially-available plastic propeller not exceeding 6" (152mm) in diameter; larger propellers may be cut down to 6". Moulding flash can be removed from the blade edges, but** only one prop blade can be scraped or sanded, and only for the purpose of balancing. **The CD will ban any single engine models suspected of having thinned propeller blades.** There are no restrictions for twins.
6. Surfaces may be single covered.
7. Canopies and windows may be represented with tissue or paper; clear material is not required.
8. Model must be recognisable to the CD as a scale model of a full-size aircraft, so a good colour scheme, control outlines, registration numbers, etc. will help. If in doubt, carry proof of scale (e.g. a photo, or a colour 3-view). Don't take the mickey because the decision of the CD is final and he does like banning things.
9. Minimum wood size for model structure is 1/16"x 1/16". Laminated outlines are allowed provided that the final section is at least 1/16" x 1/16". These restrictions do not apply to the motor stick/tube.
10. Covering must be standard commercially-available tissue (VMC, Jap, Modelspan, etc.). Condenser paper and Mylar must not be used.
11. Max motor length for single-engined models is 1.5 x prop to hook. Braided motors are not allowed. There are no restrictions for twins. The winning model will be measured and the CD will ban it if the rubber motor is too long; in this case, the second place model will be elevated to first position, and its motor will also be measured, and so on and so forth.

B. Official flight:

An official flight must be declared before launch and is defined as 10 second minimum; timer stops when model touches anything else (e.g. roof, ceiling, wall, floor, another model, person, ham sandwich, etc.). If the flight is less than 10 seconds, it counts as an attempt rather than an official flight. You can have as many attempts as you like.

C. Scoring:

Three official flights are allowed, with total time of best two to count. Times will be taken to the whole second (discarding part-seconds). The winner is the model with the longest duration over two flights that hasn't been banned for some minor infraction. In the unlikely event of a tie, final places will be determined by a fly-off.

No-Cal Rules Summary – Andy Blackburn

What this means is that you should be able to build almost anything and it'll have a reasonable chance; low aspect ratio models will be slightly disadvantaged by the propeller limitations. Nobody will show up with a really light model because all wood is at least 1/16" thick and you're not allowed to scrape the prop to reduce the weight, so models will be carrying a reasonable payload (2.5-3g, typically).

I guess that a typical competitive model weight with a plastic prop (including any ballast required to offset the weight of the prop) would be around 7-11 grams (low aspect ratio models will be heavier).

Some No-Cals – Dave King

Dauntless 8.30g plus 1.03g weight to balance motor. Rubber 0.080", has a rolled 1/32 tube motor stick but I don't see any advantage over the one used on the FW190. Paul Bradley design, printed tissue finish, trimming still in progress. [Photo: Dave King].

FW 190 6.15g plus 0.57g to balance. Rubber 0.070", has a motor stick of 2 pieces of firm 1/16 x 1/4 glued in an "L" shape and is plenty rigid enough for the rubber sizes we are talking about. Paul Bradley design, printed tissue finish, has done circa 1 minute at Berinsfield by bouncing along the ceiling. [Photo: Dave King].

Because I anticipated having to use larger rubber (1/8) on the Fike due to the drag of the large wing, the motor stick on that is reinforced with Carbon Fibre tows. Trimming is still a work in progress, and the strength of the wound motor is bending the 1/16 Ali prop mount! Also the small prop is not helping *[well, if you <u>will</u> insist on a Fike… At least it shows that the rules are working as intended! Ed]*.

Printing Tissue for No-Cal models – Dave King

Most modellers have their own way of doing things, but this is the way I find easiest.

Pre Shrinking

Because of the light structure of No-Cals it is important to pre shrink the tissue. I have a set of frames from ¼ square balsa in ½ tissue sheet size, A3 and A4. The tissue is secured to the frame along each edge with tape, sprayed with water and left to thoroughly dry. The tissue will end up tight and smooth.

An alternative is to secure the tissue to a mirror or other sheet of glass, no need to secure on each edge just corners will do, and spray as before. This method will leave the tissue wrinkled. No need to iron it completely smooth, just smooth out with the hand. Tight tissue and No-Cals don't work too well (see the washout I now have on one wing tip of my FW190!).

Printing

Printing with an inkjet printer works best with Epson printers and their own inks; the expensive printers with ink reservoirs are able to use waterproof ink whereas my cheaper Epson uses ink that will still run if made too wet, another good reason for pre shrinking.

I find the easiest way to print tissue is to coat a piece of A4 paper with a repositionable adhesive such as 3M Spray mount. Although it says "repositionable", the tissue will adhere to it too well if used straight after spraying. The technique is to give the A4 sheet a light spray, let it dry for a minute or two and then de-tack it by putting it onto another sheet of A4 a few times. Also try to remove the tissue (gently peel off from one end) as soon as the printing is done.

The pre-shrunk tissue is laid onto the A4 sheet and then cut to match. It will be necessary to lift the tissue and smooth out any wrinkles. The A4 sheet + tissue can be loaded into the printer and printed in the normal way.

Sources

A series of plans and printable tissue patterns are available from the Bradley Brothers website and also, the same plans, from the FAC website, http://www.parmodels.com/Plans/nocals.htm. The one problem with downloading from this site is that, being American, the paper sizes are different and for those with a printer only able to take A4 or smaller it can mean joining the printed panels, usually for the fuselage but it isn't difficult to do.

My Dime Scale Me109 (although not a No-Cal) has printed tissue which I did by scanning a colour 3 view and printing that to 16" span, and so the sources are not limited to those on the FAC website. Doing my own colour schemes on a drawing program on my computer is completely beyond me!

When fixing the tissue to the model, by whatever method is used, it is imperative that a nice tight finish is **NOT** achieved. It could even be argued that the system

used for condenser paper is copied, i.e. screwing the paper in into a ball and then lightly smoothing out before attaching to the model.

Other Designs

For those that use Tileprint it's easy to take any plane and reduce/enlarge it to 16" span and just build to the basic outlines of the model. I did this for my Goon and Fike E.

Other Sources

http://www.parmodels.com/techniques-and-references.html Plans, printable tissue and tips for building No-Cals. All free downloads
https://volareproducts.com/blog/ Plans, short kits and printed tissue. Transatlantic so postage not cheap. Worth exploring the site though as there are many helpful items; have a look at calculators for rubber torque, cg calculator etc.

Auster J4 – John Winfield

No-Cal Auster J4 designed by John Whatmore, weight without rubber is 7.3 grams. Motor is one 13 inch loop of 1/16 th rubber powering a 4 3/4 inch commercial prop. Flight performance is very good but Covid has prevented any timed flights [Photo: John Winfield].