FREE FLIGHT news

CONTENTS

FFn DIARY

February 11-12 Salisbury Plain	BMFA Trimming Weekend. See FFn 1201. Must call Peter Tribe on Friday before 01225 862748.
February 11-13 Lost Hills, California, USA	Kiwi Cup of New Zealand. F1A, F1B, F1C, F1E, F1P Juniors, F1Q World Cup. Contact: Roger Morrell, 1916 B Gates Ave, 90278 Redondo Beach, USA, tel +1 310 374 21 36, email: r_morrell@yahoo.com
February 12 Middle Wallop	Crookham Gala. Comb Power, Comb Glider, CdH, mini-vintage. Start 10.00. F1Q contestants to provide own Wattmeter. BMFA cards must be shown at gate, no card no fly. .Contact Roy Vaughn, tel 01344 779071, roy.vaughn@btinternet.com
February 12 Werrington Leisure Centre, Peterborough	BMFA Indoor day. 10.00 to 17.00. See FFn 1107. Contact Mark Benns 01733 755733
February 14 Lost Hills, California, USA	Pan American Cup. F1A, F1B, F1C World Cup. Contact: Chris Zbigniew Lenartowicz, 75 Eastdale Ave Apt 717, Toronto, M4C 5N3, Canada, tel +1 416 698 5325, fax: +1 413 698 5325, email: zlenart@hotmail.com web: www.torontofreeflight.org
February 16-20 Lost Hills, California, USA	Maxmen International / California Cup. F1A, F1B, F1C, F1E, F1P, F1Q World Cup. Contact: George Batiuk, 576 Dana Street, San Luis Obispo, USA, tel +1 805 305 0340, fax: +1 805 546 0700, email: slogb1@gmail.com
February 18 Nova Pazova, Serbia	3rd Koplas Pro Cup. F1N. Entry fees free. Contact: Bozo Grubic, Pinkijeva 10, 22330 Nova Pazova, Serbia, tel +381 63 80 17 132, fax: +381 22 323 597, email: bozo.grubic@yahoo.com
February 18 Manchester Velodrome	NW Area FF Gala.Lwt radio, scale, FF classes. Contact: Dave Whitehouse dave.whitehouse@aone.uk.com
February 18-19	BMFA Salisbury Plain. See February 11-12
February 19 Area Venues	BMFA 2nd Area event. C/P (White), F1A (KMAA/Plugge), F1G, Vintage R/P (Plugge), Vintage Glider, HLG-CLG(Plugge).
February 25 Manchester Velodrome	Indoor Fly In with 30 min slots for light & heavy classes. Contact: Dave Whitehouse dave.whitehouse@aone.uk.com
February 25-26	BMFA Salisbury Plain. See February 11-12
March 2-4 Moravske Toplice, Slovenia	Mura cup. F1A, F1B, F1C, F1Q World Cup. Contact: lemut Bogdan, Borovnjakova 1, 90000 Murska Sobota, Slovenia, tel +386 41 210 144, fax: +386 2 534 81 51, email: muracup@modelarji.si web: http://muracup.modelarji.si/
March 3-4	BMFA Salisbury Plain. See February 11-12
March 4 Area Venues	BMFA 3rd Area event. C/G, F1B (Duce/Plugge), F1J-/2A, Mini Vintage (Plugge), P30 (Plugge).
March 10-11	BMFA Salisbury Plain. See February 11-12
March 17-18	BMFA Salisbury Plain. See February 11-12
March 17-18 Hranice, Czech Rep.	2 F1E World Cup events. 17th Winter Cup 1, 18th World Cup 2. Contact: Vojtech Zima, Smetanovo nab. 1840, 75301 Hranice, Czech Rep., tel +420 604 589 792, email: voziteam@seznam.cz
March 17-18 Gjovik, Norway	Holiday on Ice. F1A, F1B, F1C, F1Q World Cup. Contact: Tor Bortne, Jernbanev 28, 2840 Reinsvoll, Norway, tel +47 611 974 63 or +47 920 95 329, email: tobortne@bbnett.no web: http://frifluktvegar.no
March 18-21 Omarama, New Zealand	Kotuku Cup. F1A, F1B, F1C, F1G, F1H, F1J World Cup. Contact: Robert Wallace, 956 Riverslea Rood South, Hastings 4122, New Zealand, tel +64 6 87 84 993, fax: +64 6 87 84 993, email: ffonzrjw@xnet.co.nz

7 Ashley Road, Farnborough, Hants, England GU14 7EZ ffn@btinternet.com

Compiled and produced by Ian Kaynes, Paul Masterman and Michael Warren

FFn

The FFn supply of the 2011 NFFS Symposium Report have now all bee sold. Since the NFFS have no more copies, there is no possibility of obtaining any more copies.

PA86, F1A PETER ALLNUTT

This is a windy weather and all purpose model. The profile is from Chris Lenartowicz and improved (doctored!) by Brian Eggleston.

It is a really good model with great towing characteristics in a breeze and gets really high on the launch. First flown on October 11 2011.

BMFA INDOOR

From Tony Hebb tony_hebb@hotmail.com

First of all may I thank all those who responded to the first newsletter and survey: one of the main things to come out of this is a list of local events, if you would like to be added then please let me know as I can include this information on the updated BMFA Indoor website - more on that later.

Local flying groups

We have currently identified the following list of local flying groups, a contact point, and hopefully what types of models are flown at their meetings. Please contact the organiser and pop along, have a chat and see what's happening.

North East – Allan Weighell – Legal Eagle, Gyminnie Cricket, scale, F1L littleal28@btinternet.com
North West – Dave Whitehouse – Legal Eagle, Gyminnie Cricket, scale, F1L whitehousejdavid@googlemail.com
Yorkshire, Sheffield – Neil Stewart – Sport flying nwstewart@hotmail.co.uk
North Kent, Medway – Phil Fearn – Sport flying pfiwade@blueyonder.co.uk
Cambridge, Impington – Chris Strachan General sport flying chris.strachan@btinternet.com
Stevenage – Bob Bailey – Light duration - only occasional meetings rlbailey@care4free.net
North London – Potters Bar meetings - fun fly and small electric mp.quille@live.co.uk
Ipswich – Tony Merrit, general flying tonym@irmc.co.uk
South East, Crawley – general sport flying terry.adams@tiniusolsen.co.uk
Wallingford – OFMAC- heavier classes, general flying ofmac1@talktalk.net
Oxford, Eynsham – John Shaw – Light Duration - regular monthly meetings johnshaw@alvere.wanadoo.co.uk
South, Bournemouth - Roy Tiller, general flying roy.tiller@ntlworld.com
South West, Okehampton - Andrew Bourne - FF and small RC ockmentvalley@yahoo.co.uk
South West, Truro – Dave Powis, sport flying dave_powis@hotmail.com
Northern Ireland – Rodney O'Neill – mainly duration - F1M, F1L, MS rodney.oneill@talktalk.net

ITC

The first 2012 meeting of the Indoor Technical Committee took place at Chacksfield House on the 19th January, it was a full agenda and the following items can be reported:-

F1D World Championships, August 8th to 12th, Belgrade Trade Fair

The Senior team has been ratified as Bob Bailey, Derek Richards and Mark Benns with Nick Aikman as team manager. The junior team will be Josun and Edward Cole, team manager Allan Weighell.

Six other flyers are participating in the preceding Dorcol Cup event, that's going to be a terrific representation from the UK with 15 travelling in total.

Indoor Nationals

The recent survey revealed that most people would prefer a single event over 3 days, so this what we are now trying to arrange. Provisional dates for your diaries are June 15th to 17th, Allan is trying to arrange for us to use the Boulby site again, though recent management changes there make this uncertain.

If anyone can suggest alternative venues we could well be interested!

The F1D event at the Nationals will also be the first of 3 team trials for the 2013 European Championships, best 2 out of the 3 to count. Dates and Venue will be confirmed as soon as we have them.

ITC Website

Over the coming weeks I hope to be revamping the BMFA Indoor website pages, whilst it is our intention to create our own website in due course, for the time being I shall be putting up fairly static information that will be oriented towards getting potential newcomers started.

Challenge 2012 and 2013

The ITC challenge for this year remains Legal Eagle, there is some good stuff on this class on the Clayton Green website www.creativesweb.co.uk/clayton

For next year's challenge we would like to have a simple duration model and have in mind either the SkyHi models kit "Thingy" (visit www.skyhi.org.uk for details and some very interesting and useful indoor accessories) or an Entry level 35cm for which a kit of parts will be available from Mark Benns at www.indoorbalsa.net, basically 1gm weight and no VPs, otherwise to the very straightforward 35cm rules. See plan and building instructions below.

Flying Sites

Sadly Clive King has informed us that there is little prospect of getting back into Cardington in the foreseeable future, ah well just have to keep on looking, it only takes one good site.

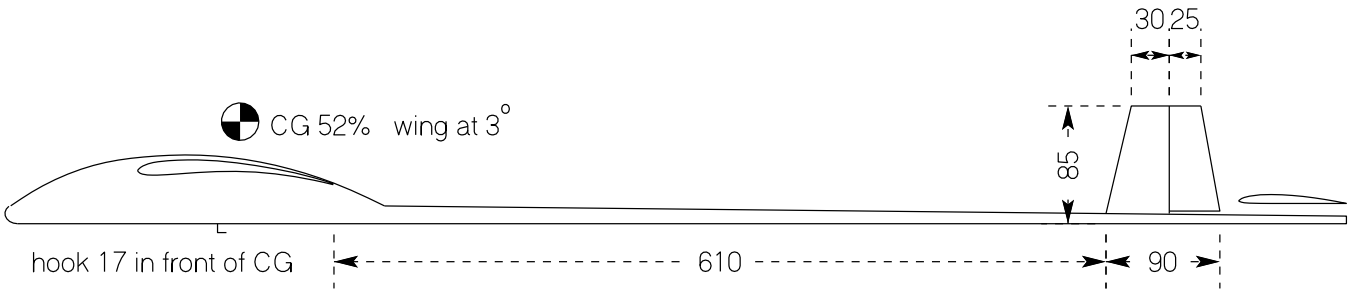
In order to facilitate that search during the course of the next few months I would like to put together some publicity material that "showcases" our indoor world, a little history, records attained - some of the amazing sites that have been flown in. Also highlight the benefits of aeromodelling in general to industry, getting kids away from eggboxes and wees an things....

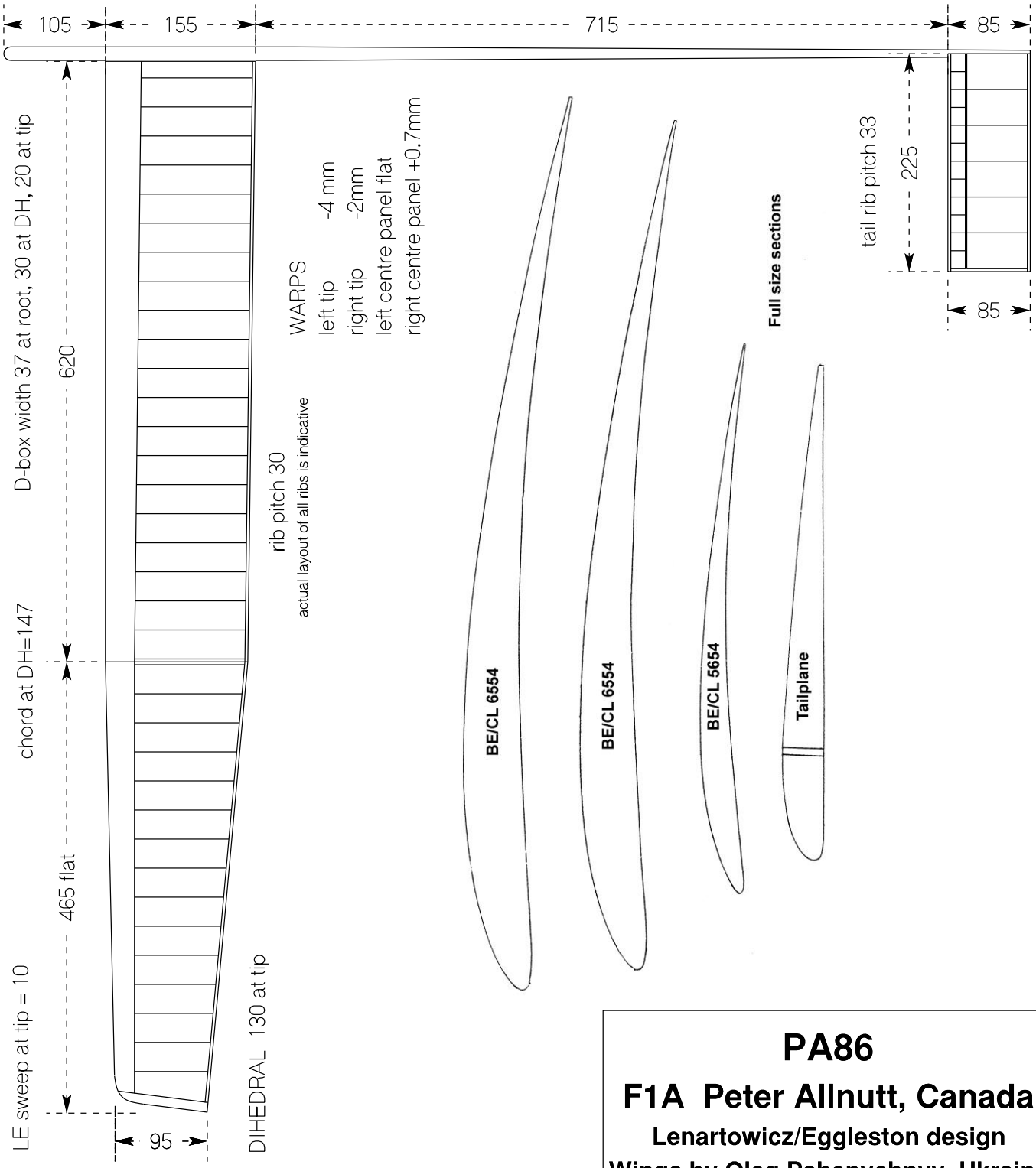
BMFA NW indoor Free Flight Gala - Manchester Velodrome.

The Indoor Technical Committee, Scale Committee and the North West Area BMFA are combining to hold the inaugural NW Free Flight Gala at the Manchester Velodrome (M11 4DQ) on Saturday February 18. The event starts at 10am with trimming sessions and the competition flights start at approx 12 noon, with prize giving around 6pm. The event is open to anyone with BMFA membership who wants to fly in the competition classes, sadly there will be no available time for fun flyers. There will be a one off cost of £15 for all entrants.

The event's time will be split between Duration and Scale models. Duration events will cater for F1D, F1M, F1L, Limited Penny Plane, No-Cal and Legal Eagle. Scale will cover Pistachio, Peanut and Open Scale Flying (CO2, Electric or rubber power only) all to BMFA rules.

The competitions will be run to the following rules:-





PA86

F1A Peter Allnutt, Canada

Lenartowicz/Eggleston design

Wings by Oleg Pshenychnyy, Ukraine

Scale 1:6 all dimensions mm

1. Any flight above the height of the lighting structural framework will not count. This is to stop models escaping from the netted area and causing problems with cyclists.
2. Any number of flights within any of the rounds can be counted towards the final results.
3. To limit duration times due to the relatively short slots, models will be flown with following motor/ballast sizes, Penny Planes and F1M's be flown on 0.75g motors and 0.75gram ballast and 0.5g/0.5g for F1L and 1/3 motors for anyone flying F1D.
4. The overall champion will be decided by adding up the points awarded in each class, thus if there are 6 competitors in a class, then the winner receives 6 points and 6th 1point. This includes scale and duration classes.

If you need any further information please contact Dave Whitehouse for Duration (whitehousejdavid@googlemail.com) and Andy Sephton for Scale (andrewjsephton@gmail.com or 07872 625279)

Events Diary

Feb 12 Werrington Sports Centre, Peterborough. Lightweight Indoor Duration day. Contact mark.benns@ntlworld.com
Feb 18 Manchester Velodrome, NW Area FF Gala, L/wt radio, Scale, FF classes. See above information.
Feb 19 Medway MFC Indoor Flying pfiwade@blueyonder.co.uk
Feb 19 Okehampton MFC Indoor FF and small RC ockmentvalley@yahoo.co.uk
Feb 25 Manchester Velodrome. Normal Indoor Fly In with 30 min slots for Light and Heavy classes.
Feb 26 OFMAC, Berinsfield FF only ofmac1@talktalk.net
Feb 26 BMFA South West Indoor Flying St Austell rogerbellamy9@hotmail.co.uk
Feb 28 Bournemouth MAS evening FF roy.tiller@ntlworld.com
Mar 11 Medway MFC Indoor Flying pfiwade@blueyonder.co.uk
Mar 11 Impington Village College, Cambridge. chris.strachan@btinternet.com for a full information sheet.
Mar 17 Eynsham. Lightweight duration only. johnshaw@alvere.wanadoo.co.uk
Mar 25 Manchester Velodrome, Normal Indoor Fly In with 30 min slots for Light and Heavy classes. Usual contacts.
Mar 25 OFMAC at Berinsfield, ofmac1@talktalk.net
Mar25 Medway MFC Indoor Flying pfiwade@blueyonder.co.uk
Mar 27 Bournemouth MAS roy.tiller@ntlworld.com
April 14 Eynsham. Lightweight Duration only
May 12 Eynsham.

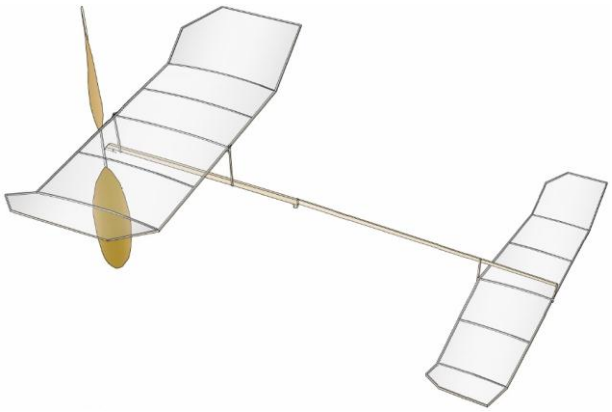
Mid June Indoor Nationals All Classes. Date to be finalised - pencil in 15th, 16th and 17th. Boulby, Cleveland, Details will be published in the BMFA magazine. Contact Allan Weighell at littleal28@btinternet.com

35 CM ENTRY LEVEL BY TONY HEBB

The purpose of this model is to provide a step on from, say, a Gyminnie Cricket that will provide excellent duration times whilst remaining easy to build. I say easy - but having built the prototype and tried to keep everything within the bounds of what a normal modeller will have available I realise that this is still difficult, but hey, you can build this model without milligram scales, a digital thickness gauge or a sophisticated balsa stripper.

Kits will be available from www.indoorbalsa.net

As your confidence and skills grow you can build new, lighter components whilst still remaining within a recognised duration class.



You will need the following tools:-A metal straight edge (preferably 24"), modelling knife, carbon steel razor blades, razor plane, pins, balsa cement (ideally 80% Ambroid/20% cellulose or acetone. If not available use UHU from the yellow and Black tubes, again thinned 50% with above), small round nosed and needle nosed pliers, small side cutters, fine sandpaper contact glued to a balsa block about 1.5" x 4".

From a material viewpoint you'll also need:-a "dual" prop bearing for EZB model from SAMS or Flitehook, 0.013" piano wire or 0.013" steel guitar string, film covering, indoor quality 1/32, 1/16 (.063")and 3/32 balsa (ideally in the 5 to 6 pound range), indoor 0.013" balsa for the prop blades, 4 to 5 pound C grain good You might consider buying one of the EZB kits that are available and using the wood from it.

Build Notes

First of all I am not trying to give a blow by blow construction account. Please, please find and read Larry Coslick's Hobby Shopper EZB article (Indoor News and Views) – he does this far better than I can and I still reference it today!

What I shall do is describe how to put this model together with as little fuss as possible and still get a decent duration model out of the other end – you will not use these construction techniques much in your indoor future!

Wing and Tailplane

Measurements – 1/16 sheet is .063", make 2 reference strips, one half this (.030") and one 3/4 (.045") just by eye is quite good enough. These will allow you to gauge the finished ribs and spar thicknesses quite well.

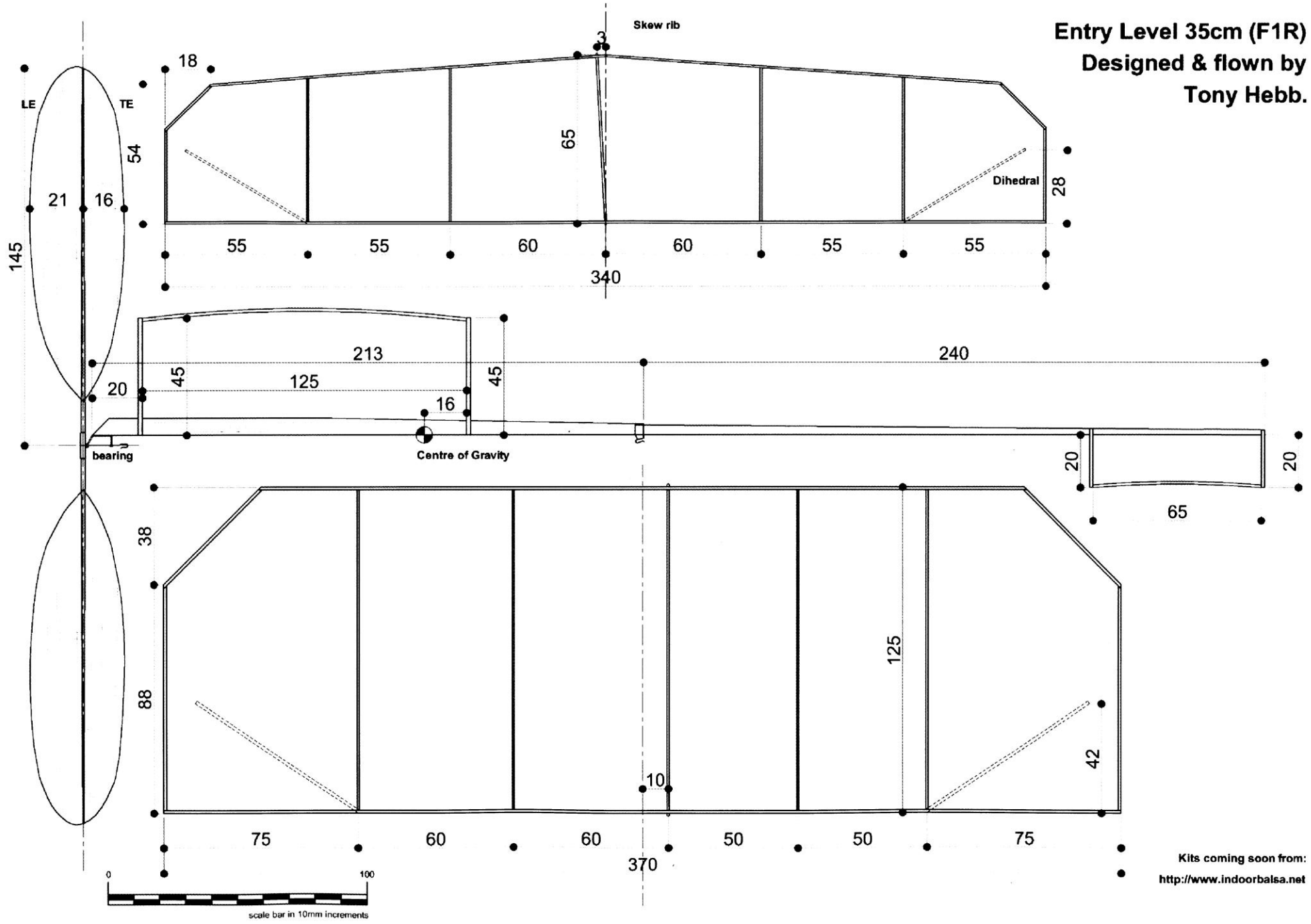
Put a new blade in your razor plane and adjust it so that it takes the finest continuous shaving possible.

Cut a piece of 1/16 sheet about 8" long by 1" wide. Mark across the top surface with a felt pen – lightly.

Take 3 shavings off the sheet starting at 2"from the tip, then at 4" and finally 6", just let the plane do the work, no pressing down, then lightly sand the sheet to give a smooth taper to about .045 at the tip.

Cut 4 spars off the sheet, cut the taper (.063 at the root) by eye so the spar is about .045 at the tip, pair up the spars and sand to match along the length. Best to straighten up the edge of the spar sheet after each pair of spars to keep the grain along the spar. Cut diagonal joints at the centre, pre glue then cement together, press against a straight edge to keep the bottom flat.

To make the ribs cut a template from stiff card, you can sand it smooth and if necessary a bit of superglue will harden up the edge. Break a razor blade in two and put some tape across the broken edge to hold it by. Use your .045" measure and a good eye to slice off 5 ribs from the 1/32 sheet.


Entry Level 35cm (F1R)
Designed & flown by
Tony Hebb.
Skew rib
LE
TE
18
54
65
Dihedral
28
21
16
145
55
55
60
60
55
55
340
213
240
45
125
45
20
16
bearing
Centre of Gravity
20
20
65
38
88
125
42
10
75
60
60
50
50
75
370
0
100
scale bar in 10mm increments
Kits coming soon from:
http://www.indoorbalsa.net

Stick ¼" squares of sellotape over the plan where the glue joints fall, then pin pieces of straight edged balsa to outline the wing frame. Set the spars in position, holding them in place with soft balsa "clamps", don't pin the spars directly. You should pre glue all joints. I attach the ribs first at the leading edge, then cut to length using a NEW piece of razor blade and glue to the trailing edge.

The tailplane is the same, except of course the spars are thinner (taper from .045 down to .030) – the ribs can be a little thinner too. Note the offset on the centre rib.

Covering is OK with Pennyplane film or lighter(eg. OS film), there are various articles describing the techniques available on-line. It's really not that difficult and so much better than condenser paper.

Finally cut and glue the spars on the wing and tail to form the dihedral breaks, make a few "rugby post" jigs to help keep things flat, makes life easy and doesn't take much making.

Motor Stick and boom

Cut the ¼ wide MS from light, stiff 3/32 sheet, reduce the front and rear to 3/16 by taking a few shavings off with the razor plane, sand it smooth, go on you can even round off the corners ever so lightly! Make the boom from 3/16 x 1/16 at the motor hook tapering to 1/8 x 1/32 at tailplane TE) – worth the effort though, this is an important piece of the model, needs to be as light and stiff as you can make it. Emphasis on the latter!

The wing posts are 1/16 square rounded (rotate gently between two pieces of sandpaper glued to a couple of flat pieces of balsa) – you only really need to round the ends. Make them a nice snug fit in the 1/16 tissue tubes. Something a little smaller diameter (about .045+) for the tail posts will be fine.

Glue the boom to the MS with a ¼" overlap joint; make sure it's straight along the bottom edge.

Next add the front bearing with 2 to 3 degrees left thrust, 0 degrees downthrust, then add the rear motor hook. Add some tissue reinforcement to both these metal to wood joints for security.

To mount the posts I glue one in place first, then use the completed wing/tail to mark the location of the other. Finally put the tubes on the posts and with the wing propped up at the right height glue the tubes to the LE and TE spars. Make sure the wing/tail surfaces are flat at this point. When you glue the tail tubes in place build in about 3/8" tail tilt (port tip high) to help the left turn. Let the joints dry *thoroughly* before handling!

Propeller

Ideally buy some light .013" C grain sheet for the blades and make as per the Hobby Shopper article, otherwise its sand down from 1/32 – a bit of a task I know.

Form the blades wet over a bottle as per the Bob Bailey article for the Gyminnie Cricket on the BMFA we site – I'd recommend just a 10 degree offset and use a larger diameter bottle (than standard wine one!) for a former to avoid over cambering the blades. Using a pitch jig is better but needs more work to produce, for this size prop. the bottle method is OK. Attach the blades to the propeller spar with 20" pitch.

Prop spar - use slightly harder balsa than for other components. Make two halves, tapering as for the wing spars to match them and join at centre with scarf joint. Form prop hook, push shaft through spar at scarf joint and bend a U at the front end. Attach with cement or thin cyano, making sure shaft is at right angles to spar. Attach blades to spar using cement as for other joints.

Prop pitch set by making tip angles about 28 - 30 degrees to shaft (make sure both are the same!).

The prop. is the heart of a duration model and time spent here will be well rewarded.

Flying

This model is going to climb like a homesick angel, so for a typical sports hall and to speed up the trimming process I'd recommend using a 1/3 motor with a 2/3 spacer – make it from hard balsa or a bamboo skewer with 20g wire ends. The size and weight of your motor (and therefore spacer) is going to be dependent on the finished weight of your model, my model weighs in at 1.25g and a full motor in the region of 1g is OK. Try about .050" thick rubber to start with. The motor is made to 1/3 weight and 1/3 distance between prop. hook and rear hook.

Hang the motor (+spacer if using) between the prop. and the rear hook and check that the model balances around the indicated CG, if not add blue tack or similar to make it do so.

The wing is set at zero incidence and the tail at -2 or 3 degrees to start with. Put on a couple of hundred turns and try it, aim to fly nose up with a left turning circle of 15 to 20' and enjoy.

Conclusion

I hope that you'll be able to get someone to help with the model as this makes all the difficult bits much simpler and they will have access to wood, rubber, scales etc. that makes everything so much easier. You can go it alone but eventually you have to fly the thing somewhere anyway, so why not get in touch up front?

Once you've made a model if you want to improve it there are many areas to try. It'll probably be heavier than you'd like, now is the time to get fussier about weight and stiffness of the balsa you use. The spars can definitely be reduced, but remember it has to support the final weight of the model! Try to get a model built at around 1.0gm. The propeller blades can easily be made from .010" balsa or even try a built up propeller! Using OS film for covering will also save 100mg or so – I find this easier to use in fact as it seems to have less static charge. Or how about a rolled motor stick?

INDOOR RECORDS

FAI has ratified the following Model Aircraft World records:

F1N Indoor Glider Duration (ceiling over 30m): 118-d 1 min 52 sec set by Stan Buddenbohm at Tustin, California, USA on July 16 2011. The previous record was 1 min 49 sec set by Mitsuru Ishii, (Japan) on March 19 2011.

F1 Open Duration (ceiling less than 8 m): 115-a 39 min 53 sec set by Kazumasa Kihara (Japan) at Kanagawa, Japan on September 6 2011. The previous record was 39min 19sec set by Robert Randolph (USA) on January 21 1996.

F1D Duration in competition, one flight: 119. 38 min 1 sec set by Ivan Treger (Slovakia) at Beograd (Serbia) on August 11 2011. There was no previous no record.

F1D Duration in competition, two flights: 120 75 min 16 sec set by Ivan Treger (Slovakia) at Beograd (Serbia) August 13 2011. There was no previous record

F1D Duration (ceiling 15m - 30m): 125-c 38 min 1 sec set by Ivan Treger (Slovakia) at Beograd (Serbia) on August 13 2011. The previous record was 36 min 23 sec set by Ivan Treger on August 22 2008.

BMFA SUPPORTERS

From Michael Woodhouse: Anyone from the UK interested in going to Italy in August for the European Championships are invited to get in touch with me regarding details etc. It's a nice easy near handy trip. Easy to get there by air or driving. The more the merrier for those who fancy a holiday in Italy with a bit of time out helping the UK team. mike@freeflightsupplies.co.uk

F1Q

By Ian Kaynes

At the 2011 CIAM Plenary meeting rules changes were agreed for F1Q with a combination of proposals from Germany and USA. The USA proposal included measuring the power at the start and end of the run to calculate an average power consumption and hence calculate the motor run allowed for the amount of energy allowed. At the technical meeting in Lausanne it was agreed to simplify this process to a single power measurement and this was included in the combination of the two proposals. However, the world "average" was left in place – meaningless when making a single measurement and without full definition of the single measurement. The Plenary text was modified to address these problems before publication. The F1Q rules are given below for reference. The full Sporting Code for 2012 can be downloaded from the FAI web site – volumes ABR and F1 together give all the rules for free flight contests.

3.Q.1. Definition

Model aircraft which is powered by (an) electric motor(s) and in which lift is generated by aerodynamic forces acting on surfaces remaining fixed in flight, except for changes of incidence. Models with variable area (eg folding wings) are not permitted.

3.Q.2. Characteristics

Nickel Cadmium (NiCad), Nickel Metal Hydrate (NiMH) and Lithium (Li) batteries can be used.

Lithium type battery packs must be in "as manufactured" condition with the covering around the cell surface. If more than one cell is used a balancer connector must be fitted.

External Battery packs are required to have a safety tether to the fuselage.

Safety locks must be used to prevent unintentional restarting of motor(s) after motor(s) have been stopped.

Rule B.3.1. of Section 4b does not apply to class (No builder of the model requirement.)

The motor run time will be determined by a maximum energy amount. In addition, motor runs over 20 seconds are regarded as overruns. The energy budget of each model is 5 joules per gram of the total weight. For energy calculations, weight exceeding 550 grams is to be ignored. Energy limitation will be by an energy limiter or by a motor run limit related to measured power.

a) For models with energy limiters. The allowed energy amount starts to be calculated with the launch of the model. If the energy limiter does not have the capability of detecting the launching moment it may start its calculation from the beginning of the motor run. The measuring device has to calculate the energy consumed in real time. After coming to the end of the limited energy supply, the motor(s) must stop irreversibly. The timer stays independent, but the device may inform the timer about the end of the energy supply.

b) For models without energy limiters the motor's energy in watt-sec over the motor run is calculated as the measured wattage multiplied by the motor run. A freshly charged battery (4.15 to 4.2 volts per Li cell, 1.2 volts per NiCad or NMH cells) should be used. When the motor has reached full power, wattage is measured using a commercial wattmeter via 3.5 mm male and female bullet connectors furnished by the contestant.

F1Q models may use radio control only for irreversible actions to terminate the flight (dethermalisation). This may include stopping the motor if it is still running. Any malfunction or unintended operation of these functions is entirely at the risk of the competitor.

The number of models eligible for entry by each competitor is four.

3.Q.3. Number of Flights

a) Each competitor is entitled to seven official flights.

b) Each competitor is entitled to one official flight in each round of the event. The duration of rounds must be announced in advance and may not be less than 30 minutes or greater than 90 minutes. The competitor must launch his model during the round for the official flight, including attempts and repeated attempts.

3.Q.4. Definition of an Official Flight

a) The duration achieved on the first attempt unless this attempt is unsuccessful under the definition of 3.Q.5. If the attempt is unsuccessful under the definition of 3.Q.5.c and a second attempt is not made then the duration of this first attempt is recorded as the official flight time.

b) The duration achieved on the second attempt. If the second attempt is also unsuccessful under the definition of 3.Q.5.a or 3.Q.5.b, then a zero time is recorded for the flight.

3.Q.5. Definition of an Unsuccessful Attempt

An attempt is classed as unsuccessful if the model is launched and at least one of the following events occurs. If this happens on the first attempt then the competitor is entitled to a second attempt.

a) the time of the motor run from the release of the model exceeds the time specified in 3.Q.2 or 3.Q.8.

b) when a part of the model becomes detached during the launch or during the flight.

c) the duration of the flight is less than 20 seconds.

3.Q.6. Repeat of an Attempt

An attempt may be repeated when the model collides with another model in flight, or a person other than the competitor himself while being launched. Should the model continue its flight in a normal manner, the competitor may demand that the flight be accepted as an official flight, even if the demand is made at the end of the attempt.

3.Q.7. Duration of Flights

The maximum duration for each flight shall be three minutes.

In the event of model recovery problems or to suit meteorological conditions, the Jury may permit the maximum for a round to be changed. Such a modified maximum must be announced before the start of the round.

3.Q.8. Classification

a) The total time for each competitor for each of the official flights defined in 3.Q.3 is taken for the final classification.

b) In order to decide the individual placings when there is a tie, additional flights shall be made after the last flight of the event has been completed. The maximum time of flight for the first of the deciding flights shall be five minutes and the maximum time of flight shall be increased by two minutes for each subsequent flight.

c) The organiser will establish a 10 minute period during which all fly-off competitors must launch their model. Within these 10 minutes the competitors will have the right to a second attempt in the case of an unsuccessful first attempt for an additional flight according to 3.Q.5. Starting positions will be decided by draw for each fly-off.

d) In the event of exceptional meteorological conditions or model recovery problems, the Jury may permit the maximum for a round to be changed and/or the motor run to be changed from that given under 3.Q.8.b according to conditions.

e) The energy and motor run limits remain as defined in 3.Q.2.

3.Q.9. Timing

a) See Section 4b, para B.13.

b) The timing of flights is limited to the durations specified in 3.Q.7 and 3.Q.8. The total flight time is taken from the launch of the model to the end of the flight.

c) The motor run must be timed by two timekeepers with quartz controlled electronic stopwatches with digital readout, recording to at least 1/100 of a second. The motor run is determined as the average of the two registered times, and this average is reduced to the nearest $1/10^{th}$ of a second below.

3.Q.10. Number of Helpers

The competitor is entitled to have one helper at the starting pole position.

3.Q.11. Launching

a) Launching is by hand, the competitor being on the ground (jumping allowed).

b) Each competitor must start and regulate the motor or motors and launch the model himself.

c) The model must be launched within approximately 5 m from the starting pole position.

NEWS FROM BMFA FF TECH COMMITTEE

FFTC meeting

The FFTC met on 28 January 2012 and the following are notes on items of interest:

Nationals

Preparation for the Nationals is well in hand and the entry forms and details will be in the April BMFA News. However CDs and assistants are still needed for the Nationals to be a success so if you can help please contact Mike Woodhouse on 01603 457754 or E mail: mike@freeflightsupplies.co.uk.

Free Flight Team Selection

The first Team Selection event for F1A, F1B and F1C will be at Barkston Heath on 16th and 17th June. CDs are still needed for this and the second event at Sculthorpe on 8th and 9th September. If you can help please contact John Carter on 01782 398816 or E mail:carterbuild@yahoo.co.uk.

Please be reminded that the entry fee for the above events to choose a team for the 2013 World Championships in France is considerably reduced from the fees in 2011. Entry will be pre-entry only with an inclusive fee of £25 which must be submitted before the 2nd of June. This will cover both weekends and include all three classes so those who fly in more than one class will save considerably. Please note that late entries will not be accepted.

The entry form will be published in BMFA News.

Team for F1E European Championships

Our team for the F1E Euro Champs. at Turda Romania is:

Members I Kaynes, S Philpott, P Fynn

Reserves Nick Bosdet, Doug Bartle

Northern Gala

We now have clarification that the 2012 Northern Gala will be held at its traditional home at Church Fenton as the issues which lead to the possibility of a move to Barkston have now been resolved.

Also please note that the Club Championships will be at the Northern Gala this year as they alternate between the Northern and Southern Galas.

Gordon Warburton will be the CD and can be contacted at gwarb@aol.com

(Ed: The announcement in FFn last month was premature, before this decision had been finalised)

Stonehenge Cup 2012

Please note that the contact for the Stonehenge Cup is Peter Tribe. Peter's E mail is petertribe46@talktalk.net.

BMFA Rule Books

Please note that the BMFA rule books are available free in PDF format and can be accessed using the following url:

http://www.bmfa.org/publications/rulebooks/index.html

INTERNATIONAL COMPETITION NEWS

Mostar Cup in Bosnia and Herzegovina now has web site www.akmostar.com and F1Q has been added to the event list.

Mura Cup has new website: http://muracup.modelarji.si/ and email: muracup@modelarji.si

FFCRO event scheduled for July in Croatia does not appear on the calendar (unpaid registration fee).

Black Sea Cup of Georgia in the Ukraine in September has been removed from the calendar since Georgia are suspended from FAI.

NOTICEBOARD

WANTED. F1A mechanical bunter/circle tow model wanted, preferably a new model or in A1 excellent condition must be a flyer (not your old hack). W-hobby Seja or M&K,Yablonovski, Stamov, Mikhail Kosnodkin Universal model or similar factory model considered. Contact Kevin Dart on 07545955921

UK COMPETITION NEWS

MIDLAND AREA. From Phil Ball: Please note that the Midland Area Meetings have the following Venues

2nd Area	Feb 19	Barkston
3rd Area	March 4	TBA trying North Luffenhan (Barkston is not available)
4th Area	March 25	Barkston

Please try to get to Barkston early as the gate will not be manned after 10am.

F1G AT STONEHENGE CUP MEETING. By permission of the BMFA FFTC an F1G event will be run alongside the World Cup events on the second day, that is Sunday May 13. It will be flown in five rounds from a line. Unlike last year, entries will only be taken on the field, no pre-entry. Competitors will be responsible for providing timekeepers. Contact Peter Hall on 01483 898288 or Roy Vaughn at roy.vaughn@btinternet.com.

OXFORD MFC FREE FLIGHT RALLY will be at Port Meadow, Wolvercote, Oxford on June 9 and 10. 'Champagne flyoffs' for F1G, F1H, and HLG/Catapult (combined) will start at 6.30pm on the Saturday. Flying on Sunday starts at 10am with the following events:

Flown to 5 flights 2 min max in rounds from a line: F1G, F1H, E30/P30/CO2 combined.

Flown with 3 flights 2 min max from line with no rounds will be: vintage rubber (34" max span), vintage glider (72" max span), classic glider 1951-1960 inclusive, tailless rubber/glider combined.

HLG/Catapult combined will be flown to 1 min max from a box.

All gliders will use 50m towlines.

No thermistors, streamers on poles, bubbles, etc. No i/c power models to be flown. No motor heaters. All flyers must be insured. Special awards: Ian Maconald Trophy for top vintage rubber, Top Lady, Top Junior, Gala Champion. Contact: Andrew Crisp, 4 Grove Street, Oxford OX2 7JT tel 01865 553800

65TH ODIHAM RALLY. John Thompson: We shall be running this event on June 17 with the same comps and sport flying as last year. Full details will be issued once the MOD Licence has been received.

TYNEMOUTH MINI RALLY.. The Tynemouth Club are to run a Mini Rally for:

Combined BMFA 1/2A/Brit Power (8 sec motor run),

Combined F1G/Mini Vintage Rubber, F1H (3x2min),

Combined HLG/Catapult Glider (5x1min)

on Sunday July 22, 11am to 4.30pm. Reduced maxes and D/T fly offs depending on weather. No thermal detection devices. The venue is Newcastle Town Moor, a flat grass field site measuring approx 1/2 mile East to West and 3/4 mile North to South, situated North of Newcastle City centre bordered by the A167, A187 and B1318 roads. Free parking on Claremont Road and the Eastern end of Grandstand Road.

The Rally qualifies for the F1H Biggles League. Contact Brian Martin on 0191 4161096 or email brian_martin_uk@hotmail.com