

FREE FLIGHT news




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FFn DIARY

January 30 Ceminac, Croatia	F1N Indoor Open Ceminac. F1N. Contact: Antun Sikic, tel: +385 31 208 262, email: asikic@gmail.com www.aeromodelarstvo.net	March 7-8 Säkylä, Pori, Finland	Bear Cup. F1A F1B F1C F1Q. World Cup event. Contact: Kim Henriksson, tel: +358 44 7688 370 kim.henriksson@vahanen.com web: http://lennokkipojat.fi/
February 7-9 Lost Hills, California, USA	Kiwi Cup. F1A F1B F1C F1E F1P F1Q. World Cup event. Contact: Roger Morrell, tel: +1 310 483 8776, email: r_morrell@yahoo.com	March 7-8 Hranice, Czech Rep.	Winter Cup I and II. F1E. World Cup event. Contact: Vojtech Zima, tel: +420 604 589 792, email: voziteam@seznam.cz
February 8 Area Venues.	BMFA 1st Area. F1A (SMAE), F1G (Plugge), C/P (White), E36 Plugge), Mini Vintage (Plugge).	March 14 Gjovik, Norway	Holiday on Ice. F1A F1B F1C F1Q. World Cup event. Contact: Tor Bortne, tel: +47 920 95 329, email: tobortne@bbnett.no web: http://www.frifluktvegar.no
February 10 Lost Hills, California, USA	North American Cup. F1A F1B F1C F1Q. World Cup event. Contact: Tony Mathews, T +1705 7545553 tmathews180@gmail.com web: http://www.torontofreeflight.org	March 22 Area Venues.	BMFA 3rd Area.Vint' G (Plugge), C/R (Gamage), F1C (Halfax/Plugge), F1Q, HLG-CLG (Plugge).
February 12-16 Lost Hills, California, USA	MaxMen International. F1A F1B F1C F1E F1Q F1G F1H F1J. World Cup event. Contact: Bill Booth Jr, tel: +1 760 842 1079, email: booth@boothsuarez.com	March 28-29 Tapolca, Hungary	Herend Cup. F1A F1B F1C F1P F1Q F1H. World Cup event. Contact: Ferenc Kerner, tel: +36 20 584 53 49, email: ferenc.kerner@herend.com web: http://www.herendimodellezose.hu
February 21 Nova Pazova, Serbia	6th Koplas Pro Cup. F1N. Contact: Martin Grubic, tel: +381 63 86 58 182, email: martin.grubic@yahoo.com web: www.aknovapazova.com	March 28 - April 2 Slanic Prahova, Romania	FAI Indoor European Championship Seniors and Juniors. F1D.
February 28 Viabon, France	12th Philippe Lepage - Rubber Days. F1B. World Cup event. Contact: Jean-Pierre Challine, tel: +33 1 75 59 94 37, email: mjp.challine@sfr.fr	April 3 (Good Friday) North Luffenham	BMFA Northern Gala. C/G (CMA), C/R (Caton), B/P (Hamley), C/E, SLOP (Falcons), F1H, P30, BMFA 1/2A, Mini-Vintage, HLG-CLG. Contact: G.Warburton 0113 2852947
March 1 Area Venues.	BMFA 2nd Area. F1H, P30 (Plugge), F1J (Plugge), BMFA 1/2A, CE (Plugge), HLG-CLG.	April 10-11 Orim, Israel	Passover Open. F1A F1B F1C F1P F1Q F1G F1H. World Cup event. Contact: Aviad Levy, tel: +972 3 517 50 38, fax: +972 3 517 72 80, email: office@aeroclub.org.il web: http://www.aeroclub.org.il
March 5 Säkylän Pyhhäjärvi, Finland	Swedish Moose Cup. F1A F1B F1C F1P F1Q. World Cup event. Contact: Per Findahl, tel: +46-223 22957, email: per.findahl@gmail.com web: http://norbergsfk.se/swedishcup	April 11-12 Oberkotzau, Germany	11th: World Cup Oberkotzau, 12th: 4th Föhrberg Cup. F1E. World Cup events. Contact: Peter Kuttler, tel: +49 160 945 164 69 / +49 928 66 187, peter-kuttler@web.de

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FFn

Welcome to a new year of FFn and thank you to everyone who renewed their subscription for the year.

Please note that the 2014 NFFS Symposium Reports from FFn have all been sold.

MODEL PERFORMANCE AND CIAM PROPOSALS FOR 2015

By Ian Kaynes

The CIAM Free Flight Subcommittee always keeps model performance under review, but this has been brought into particular focus by the performance evident in the 2013 World Championships and 2014 European Championships. There is a mismatch between our model performance and the typical size of fields available and the competition format. This is shown by the 7 round flights leaving half the competitors with a full score, when flights of over 10 minutes are possible in flyoffs, and when timekeeping eyesight becomes a factor in flyoff results when there is any wind.

The basic problems are thus the

- number of flights needed to complete the competition because performance exceeds the maximums required in most rounds
- the distances model fly are much larger than many flying fields
- timekeeper eyesight can be a limiting factor.

The problem is what to do about this and how to reduce performance without immediately making existing models obsolete. A difficulty in making any more fundamental changes is the current CIAM rule change schedule whereby proposals are only accepted for the Plenary meeting in the year in which the World Championships are held and any proposals which are accepted become effective the following January. Thus proposals which have now been submitted will be discussed at the April 2015 Plenary meeting and if accepted become effective in January 2016. There is currently no possibility of delaying implementation in order to give more notice of changes which might make models obsolete.

An apparently simple model change is to increase the minimum weight. However, the effect of this would be reduced by developing new wing sections to suit the faster flight speed and use the additional weight for installing more complexity in the models, again making existing models obsolete in a short time.

A fundamental option would be to change to the small classes (F1G F1H F1P) but this would represent a considerable break with tradition, render all models obsolete and so probably be even more unpopular than restrictions on the ABC models.

Other possibilities for each class include the following.

F1A

This is the class which has probably seen the greatest increase in performance in the recent years. The zoom height obtained by LDA or flapper models doubles what used to be achieved as a launch height. Line length could be reduced to scale down the performance, but this is the type of change which expands the gap between expert and average competitor, and makes the zoom launch more important. Changes which reduce the zoom launch height could reduce the recent increase in performance. This might be done by ruling that the line cannot be released when launching, having a line strength limit – having a “fuse” in the line which would break at a specified tension, or increasing line drag via a minimum line diameter or a pennant with increased drag. Larger and non-porous pennants were tested by two members of the FFSC and found to reduce launch height but to make towing much less pleasant.

On the aircraft banning flaps would simplify some models but would not reduce performance significantly, just drive models to use LDA sections. A more fundamental limit would be to ban incidence changes of the tailplane, which would totally change launch concept.

F1B

This is possibly the most difficult class on which to reduce performance, but probably also the class with least need of reduction. To reduce motor weight is the easy way, but this falls into the category of a change which increases the gap between expert and average flyer. Banning delayed prop release or variable pitch props would simplify models but only reduce performance by a few percent. Flaps have not really demonstrated their value, but banning them now would remove another potential complexity before it has become widespread. Limiting the competitor to using only VIT or rudder – but not both – would reduce performance but would also make trimming harder and possibly less satisfactory.

F1C

There are several features on power model which contribute to performance, complexity, cost of models, and unreliability: geared motors, flaps, folding wings. Reducing the motor run would be possible immediate change. Reducing motor air intake size with a maximum venturi diameter (used in some other model categories) would be simple to implement but would need evaluation for what value of limit to set for F1C. Banning geared motors or the model simplifications would need to be on a longer timescale in view of the investment in current models. Banning folding and flapped wings would have the advantage of improving model reliability and possibly reducing the number of crashes, and that danger part of our consideration for F1C.

Organisation of flying

From a performance standpoint the F1A first round max could be brought into line with the other classes at 4 minutes.

The concept of a working time could bring added pressure on finding lift during the rounds. At a championship a limit of 10 minutes could be applied from the time you have engaged a timekeeper, if you have not launched by the end of that time it is counted as an attempt. Each flight would thus be similar to a flyoff as regards the preparation and launch time. Easy to apply to F1B and F1C but rather harder for the flyer to know the time in F1A when towing, but similar to a flyoff in that regard.

This could be extended to a group flying concept where groups of competitors fly together in a limited time window, with some form of normalisation to allow for different weather conditions for each group.

If performance could be reduced a little or more extended maximum flights made, it would be possible to reduce the number of flights below seven. This would reduce the current marathon of a very long competition day for competitors and timekeepers.

CIAM Proposals for 2015

The following is a summary of the proposals submitted for changes to the Volume F1 of the Sporting Code. Full details will be contained in the agenda for the April 2015 CIAM Plenary meeting.

Model Changes

Germany propose to ban variable geometry of variable wing area in the specifications of F1A, F1B, F1C, F1G F1H F1K F1P. The reasons are given as:

- 1 not too complex to build
- 2 not too complex to handle
- 3 not too expensive
- 4 to give a newcomer a lot of fun and satisfaction from the beginning
- 5 to keep the gap between a good flyer and a high-end flyer limited

Poland propose reducing the F1A towline length from 50m to 40m in order to reduce the numbers of fly-offs. Austria propose reducing the F1A towline length from 50m to 35m. The reason is given as: "Performance of F1A models is too high for nowadays flying sites under nowadays rules. The reduction of towline length is a good means to reduce performance."

United Kingdom propose:-

In F1A the towline diameter must be at least 1.75mm and the line must not be released by the competitor until after the model has been launched.

In F1B the propeller must have been released before the model leaves the competitor's hands.

In F1C the maximum motor run is reduced from 5 to 4 seconds.

These are one element of a proposed series of restrictions on F1A F1B and F1C postulated for future years. See the UK discussion document below.

Germany propose reducing the maximum weight of an F1B motor from 30g to 25g. This will reduce the height of the climb and it is suggested that glide time after the propeller has folded will be of the order of 200 to 220 seconds. This will reduce the numbers in the flyoff.

Austria propose a requirement that all F1C models must have RDT, in order to reduce the feasibility of accidents with physical injury to minimum.

Austria also propose that the F1C standard fuel should use ethanol instead on methanol. This is said to offer the two advantages that performance is reduced about 20% without any design changes and toxic agents are no longer used. Germany also propose the same change, with similar reasons

Poland propose to reduce the F1C motor run from 5 seconds to 4 seconds, in order to reduce the numbers in the flyoffs.

The FFSC propose to ban flaps on the classes which have not yet started to use them: F1E, F1G, F1H, F1J, F1K, F1P. This is to eliminate the potential for added complexity in these classes. There was not a clear majority in favour of extending the ban to F1B and so that class is not included.

The USA propose to introduce the E36 class as new FAI class F1S, which proposal was made last year by the FFSC but then withdrawn for lack of support.

Flight time and contest organisation

The FFSC propose to increase the maximum for F1A in the first round to 4 minutes. Poland also propose this change.

As another change of maximum for F1A F1B and F1C, the FFSC propose also using a 4 minute maximum for the last round if conditions allow. In addition the number of flights should be reduced from 7 to 5. This aims to reduce the marathon nature of flying 7 rounds before the flyoff, with this ease of reaching the flyoff offset by the increased difficulty of a second long maximum flight. The maximum duration is still subject to change according to conditions. A number of World Cup events are already flown to a 5 round format without any problems.

The FFSC propose that the maximum first flyoff be increased to 6 minutes. The 5 minute flyoff represents only a small increase over the rounds and is often rather easy to achieve.

The FFSC propose a system for splitting flyoffs with 12 or more competitors into 2 groups. This would ease the organisational difficulty of large flyoffs which are always possible in good weather. These stretch the facilities to the extreme both in terms of the number of timekeepers and the number of starting positions required. The proposed scheme, a

simplification of a system used in Finland, endeavours to balance the potential unfairness of different flying conditions for the two groups. It is possible that on some occasions (item 7) there may be another flyoff required which might not have happened without the group flyoff system. However, this is considered worthwhile for avoiding a final choice of winner based on the results within the different conditions of 2 group flyoffs. The flight times are used directly for ordering the people eliminating the people in the group flyoff irrespective of the different flying conditions. With another flyoff guaranteed by (7) this ordering will not determine the winners but just the lower places. The chance element of being in a group with good or bad air is no different to the starting position draw for F1B and F1C when good air goes past only one end of the starting line.

The proposal requests adding a new item (f) to the bottom of paragraph 3.1.8:-

If the number of competitors in a flyoff is 12 or more and is greater than 25% of the number of competitors in the competition, then the flyoff shall be split into two groups

- 1) The number of competitors in each group will be as closely as possible equal
- 2) Competitors are allocated a group and starting position by a single draw
- 3) A flyoff is flown for each group according to the other regulations of 3.1.8
- 4) The second group flyoff must be flown as soon as possible after the first group.
- 5) From both groups all flyers who achieve the maximum duration proceed to the next round
- 6) An equal number of flyers from each group may proceed to the next round by including competitors from one group those with the best flights below the maximum time, providing the flight times are at least 75% of the maximum.
- 7) If the selections (5) and (6) result in fewer than 4 competitors proceeding to the next round, then the two competitors with the highest flight times in each of the groups will proceed to the next round.
- 8) Competitors eliminated in group flyoffs will be classified with final placing according to time achieved in the group flyoff

UK PERFORMANCE DISCUSSION PAPER

From BMFA FFTC

Increasing FAI Participation

Lots of you will have seen the discussions on e-mail, chat rooms and social media about the proposals that the BMFA (the UK's NAC) has put up for presentation at the 2015 CIAM Plenary.

Many will say they're ridiculous but they've missed the point we need to be talking not about what we do next season but the season 5 years on from now. In other words we need a long-term plan.

When you see these proposals (there's a summary further on) you'll realise that they contain the ideas for a proper future - not yet another 'reactive' quick fix.

The aim is to get more people involved in flying models in the FAI Free Flight Classes that aren't too complex or too expensive or beyond their building skills. What will still be needed from those people, whatever they fly, there will still be a lot of commitment.

We've been thinking of a way to do all this without creating a new set of classes, but at the same time gradually reducing the impact of current technology.

Some people have wondered whether a lot of today's flyers would give up if there was a "ban" on current advanced

technology models and of course the last thing we want is for any of today's flyers to give up; we think there's a way of having our cake and eating it.

We need to reduce the technology - content and impact - gradually. Not in a knee jerk one-season effort but over a five-year thought through plan that gives FAI model flying an assured future. What we need is more people flying and that flying needs to be more accessible.

We need to remember all the factors that impact on our activity and take account of the real World.

The aim of the BMFA proposal is to begin this process. We believe that CIAM as a whole (a lot of this applies to all the disciplines - not just Free Flight) needs to consider the long term future for the FAI classes and this may well mean altering CIAM's legislative process to allow this to happen.

Proposal to CIAM to contain F1 performance

The premise for the rule changes:

The UK holds it to be self-evident that the performance of F1 class Free Flight models has reached a level which now exceeds sensible limits.

We believe CIAM should commit to a planned step change in performance reduction over a period of five years. The CIAM bureau should mandate the free flight subcommittee to take the appropriate action to create and implement the necessary changes.

Current F1 class models have become extremely effective in achieving the maximum times and Championships are now decided on the fly off. The numbers reaching the fly off are far too high a proportion of the entry. In the last two events some 50% of the entry made the cut. In addition to the management of the numbers we have the situation of models out flying the sites available to us, especially at fly off time when flights of 10 minutes may be required to achieve a result. We need a long-term plan to reduce performance, and hence flight times, without emasculating the event.

In addition we should seek to reduce complexity and thus the cost. The models should be brought closer to the reach of the competent and ambitious sportsman and reduce the need for commercial involvement.

The levels of performance reduction needed are in the order of 50%, to enable a meaningful competition with a round maximum of 2.30 and maximum model performance of no more than 4 minutes.

The change process will require firm management but must avoid the danger of killing enthusiasm for the discipline. We suggest that a programme of change should be staged over 5 years with final complete replacement of models at the end of that time.

The structure of CIAM has meant that in the past changes have been made to model specifications and organisation on a reactive rather than a proactive basis. The effect of this has been to drive the models into ever-greater complexity. Rather than being driven by events we believe that CIAM should change this approach and adopt a proactive plan in order to tackle the current issues. The suggestions are as follows:

The staging of change

Stage 1 - Reductions in performance without model changes – with effect from 2016. These changes are to show that CIAM is serious in its ambition to take proactive control.

Stage 2 - Elimination of devices/technologies that may require re-trimming of models but will not make complete airframes redundant – effective from 2018

Stage 3 - Changes that that will require completely new airframes and will deliver still-air times of no more than 4.0 minutes and enable round maximums to be reduced to 2.30. - effective from 2020

In order to comply with CIAM procedures only stage 1 changes are tabled as specific proposals at this time. This paper is appended in order to show their position within the phasing of the overall plan.

Detailed rule changes

Stage 1 rule changes

This stage is for simple ideas that will limit the existing performance without a wholesale change to the specification. The existing models can still be flown but there are some limitations placed upon their performance.

- F1A. The diameter of the towline to be increased (specified as 1.75mm diameter) the drag will reduce the launch speed. The towline is not to be released on launch. The launcher final contact point to be within one metre of the end of the line. This will cut the launch impetus and thus the altitude gain.
- F1B. DPR prohibited – A two handed launching is required. This will cut the launch impetus and thus climb height.
- F1C. Cut the engine run to 4 seconds.

Stage 2 rule changes

This stage starts the changes to the model specification. The following “devices” to be prohibited and restrictions introduced. This would be in 3 years (January 2018) these changes can be made without making total model fleets immediately redundant.

- F1A
 - Flaps to wings banned
 - Restrict tow movement to three functions being straight, circle and launch.
 - Release functions restrict to only launch and glide settings.
- F1B
 - VP props banned
 - Flaps to wings banned
 - DPR prop start banned
 - Only a single timer function other than DT
 - Limit prop diameter to 500mm.
 - Discus launch banned
- F1C
 - Geared engines banned
 - Flapped wings banned
 - Folding wings banned
 - VP props banned

Stage 3 rule changes

In 5 years (January 2020) further stages that will mean totally new aircraft. The limitations in stages 1 and 2 would be retained but in addition.

Span limitation for all classes

- F1A 1.90 metres
- F1B 1.30 metres
- F1C 2.10 metres

Management of the event

- Reduce rounds to 5. The consistency of models means that in good conditions models will still max, the number of flights has a minimal impact. This change allows more time to organise the eventual fly off.
- Within rounds allow a 10-minute working time to launch after the commitment to fly.
- At final stage a reduction of the max to 150 seconds. There will be a sufficient reduction in performance from all the changes to make this a suitable challenge and reduce the size of the flying site size required.

The effect: We believe that the above will start the debate and bring the performance of the F1 classes under control. The changes will still provide exciting models.

HANUKKAH OPEN, ORIM, ISRAEL, DECEMBER 19-20

F1A 51 flew

1	J Danier	CAN	930	+300	+390
2	Y Kraus	ISR	930	+300	+348
3	L Bachar	ISR	930	+300	+338
4	M Pinhas	ISR	930	+300	+335
5	A Studnik	ISR	930	+300	+332
6	K Cohen	ISR	930	+300	+323
7	S Limor	ISR	930	+300	+262
8	A Kidron (J)	ISR	930	+300	+255
9	M Kosonozhkin	RUS	930	+300	+233
10	E Gerber	ISR	930	+300	+218
11	L Hershkovitz	ISR	930	+300	+215
12	A Levy	ISR	930	+276	
13	T Rozin (J)	ISR	930	+264	
14	A Balasiano	ISR	930	+232	
15	M Moskowiz	ISR	930	+206	
16	O Shecter (J)	ISR	930	+125	
17	A Shpringer	ISR	930		
17	I Vivchar	UKR	930		

F1A-Junior 10 flew

1	A Kidron	ISR	930	+300	+255
2	T Rozin	ISR	930	+264	
3	O Shecter	ISR	930	+125	

F1B 23 flew 13 full scores

1	A Andriukov	USA	960	+300	+420	+480
2	G Mark	ISR	960	+300	+420	+392
3	I Vivchar	UKR	960	+300	+420	+386
4	A Rybchenkov	RUS	960	+300	+420	+377
5	T Faibish	ISR	960	+300	+381	
6	Y Karpel	ISR	960	+300	+353	
7	Y Segev	ISR	960	+300	+318	
8	S Kuflik	ISR	960	+223		
9	A Shelepov	MNE	960	+200		

F1B-Junior 1 flew

1	T Arbel	ISR	883		
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F1C 10 flew 8 full scores

1	M Mashlach	ISR	960	+300	+368
2	A Babenko	UKR	960	+300	+331
3	N Rekhin	RUS	960	+300	+315
4	A Elyakim	ISR	960	+300	+300
5	S Nagari	ISR	960	+300	

FAI FREE FLIGHT WORLD CUP

This year the Free Flight World Cup finished later than usual because the Hanukkah Open competition in Israel on December 19-20.

The total number of participants was 4891, slightly higher than the previous record number which was achieved in 2012. This was for one more competition than in 2012 so the average entry in each event remains about constant. This is notable in view of a number of competitions which have been cancelled this year. Three Scandinavian winter events were lost: Holiday on Ice, Swedish Moose Cup and Bear Cup. These were all to be flown during March on frozen lakes, but the warm winter resulted in the ice not being as thick as usual and the events were cancelled. The two F1E events scheduled to be held in Germany during April were also lost because of the weather, these because the crops on the farm fields were too advanced to allow flying on the fields. Another two events were lost in different circumstances. These were events sponsored by Moldova to be held at Feodosia in the Crimea. It had been established with the FAI that these events would be treated as events in Ukraine and results were received just after the scheduled date of the events. The results were not dated and showed at least one competitor who had been flying in France at that time. Clarification was requested and it was then acknowledged by the local organiser that the events had taken place two weeks earlier. This change had not been notified to

the FAI and so the competitions were classed as ineligible for the World Cup.

F1A was closely fought until the last competition. Before the final event Roland Koglot of Slovenia was leading with seven victories this year, the best 4 of these giving him 17 bonus points. He was followed by Jama Danier (Canada) with the same number of victories but 3 fewer bonus points, and then Anton Gorsky (Russia). Koglot did not attend the competition in Israel but Danier did, knowing that with a win with 5 bonus points he would win the World Cup. He did exactly that but in circumstances that aroused much debate on social media. The results were being posted online during the competition and in the first rounds there were seen to be 48 flyers in F1A, which would give the winner 4 bonus points (one point for every 10 flyers beaten). In the final round flights were made by 3 flyers (not regular F1A flyers) to give a total of 51 flyers, enough to give 5 bonus points and Danier won the flyoff. It was ascertained that the extra flyers had registered the day before the competition and the models (from Danier) had been marked with the flyer's numbers.

The F1A-Junior winner is Mikhail Lomov (Russia), followed by Slovenians Luka Biteznik and Jernej Jurhar. These flyers have 4, 3, and 2 wins respectively followed by a number of second places each.

F1B World Cup leader before the last event was Bernd Silz (Germany) who had won the cup on 5 previous occasions. However, he was overtaken by Alexander Andriukov (USA, 6 times World Cup winner) who won the Hannukah Open and thus had the same scoring record of three wins and a second place as Silz, but Alexander had 4 more bonus points than Bernd and thus won the World Cup. Third place was taken by Anatoliy Rybchenkov (Russia), also with three wins and a second place but fewer bonus points than the other two flyers.

F1B Junior winner is Dawid Lipski (Poland) followed by Bojan Gostojic (Serbia) and Clement David (the Junior World Champion from France).

The winner of F1C is Vladimir Sychoy (Slovenia), followed by Nikolay Rekhin (Russia) and Artem Babenko (Ukraine). The first two have the same number of points, with the lead determined by counting an extra event.

F1P Junior winner is Taron Malkhasyan (USA) who won the event last year. Daniel Bogomaz (Poland) takes second place and in third place is Russian flyer Alexander Kuznecov who finished in that position last year.

The winner of F1Q is Zeljko Grepl of Croatia, followed by Ron Assmuss (Germany) who was in the same place last year, and third is Gabor Milak (Hungary).

Frantisek Kanczok from Poland is the very clear winner of F1E with two victories and two second places which were achieved at large competitions. Runner up is Christian Winker (Junior from Germany) and third place is taken by Jaromir Orel of the Czech Republic. In view of those results, it is not surprising that Christian Winker won the F1E Junior World Cup for the second year. He was followed by Polish flyer Konrad Zurowski, the current Junior World Champion and now in his last year as a junior. Third place goes to Sofija Chorna from Ukraine secured by her second place in the Friendship Cup of Ukraine flown in Poland.

Organisation

The organisation of the 2014 Free Flight World Cup ran relatively smoothly, with just a few cases of slow return of results and some delaying processing of results by supplying initial results in pdf format which hinders processing the World Cup standings.

The top three places in each event have been displayed on the FAI web site and updated frequently throughout the year at the address:

and there are links to this from the FAI web page for both the results of each class or the overall summary.

The individual events F1A, F1A-Junior, etc show the numbers relevant to that event. The column headed ALL is the total of number of competitors in the full events (F1A B C E Q) which takes account of the fact that juniors have also been included in the results of the full event.

Total number of participants in all competitions: **4891**

F1A		F1A Junior		F1B		F1B Junior		F1C		F1Q		F1P Junior		F1E		F1E Junior		All	
RUS	30	RUS	7	RUS	26	POL	4	RUS	15	GER	4	RUS	6	FRA	11	POL	5	RUS	82
ISR	16	CZE	5	FRA	14	RUS	4	UKR	8	HUN	3	POL	1	POL	10	FRA	4	FRA	45
FRA	13	ISR	4	UKR	14	BUL	2	ISR	5	GBR	2	USA	1	ITA	7	ROU	4	POL	38
CZE	12	SLO	4	USA	13	USA	2	POL	5	USA	2			ROU	7	GER	2	USA	34
GER	11	FRA	3	ISR	10	CRO	1	USA	5	CRO	1			CZE	5	ITA	2	ISR	33
SLO	11	HUN	3	POL	9	FRA	1	GBR	4	FIN	1			GER	3	UKR	2	UKR	33
SVK	9	MKD	3	GER	7	ISR	1	AUS	3					SVK	3	SVK	1	CZE	27
UKR	9	ROU	3	AUS	6	LAT	1	CRO	2					SUI	3			GER	27
USA	9	SVK	3	CZE	5	UKR	1	GER	2					USA	3			GBR	20
GBR	8	USA	2	GBR	5	SRB	1	ITA	2					AUT	2			ROU	16
BUL	7	AUT	1	SLO	4			AUT	1					GBR	1			SLO	16
POL	7	BUL	1	SWE	4			BLR	1					UKR	1			SVK	14
BIH	5	CRO	1	CAN	3			BUL	1									AUS	11
DEN	5	POL	1	NED	3			EST	1									CRO	11
FIN	5	SWE	1	NOR	3			FRA	1									HUN	11
MKD	5	UKR	1	TUR	3			HUN	1									BUL	10
SWE	5	SRB	1	SRB	3			JPN	1									ITA	10
CRO	4			BIH	2			MGL	1									SWE	9
HUN	4			CRO	2			NED	1									SUI	8
SRB	4			NZL	2			SLO	1									SRB	8
ROU	3			SUI	2			SRB	1									BIH	7
SUI	3			BUL	1													FIN	7
AUS	2			FIN	1													MKD	6
AUT	2			HUN	1													NED	6
NED	2			ITA	1													AUT	5
TUR	2			KAZ	1													DEN	5
BEL	1			LAT	1													TUR	5
CAN	1			LTU	1													CAN	4
KAZ	1			MGL	1													NZL	3
LAT	1			MNE	1													NOR	3
NZL	1																	KAZ	2
																		LAT	2
																		MGL	2
																		BLR	1
																		BEL	1
																		EST	1
																		JPN	1
																		LTU	1

F1	A	AJ	B	BJ	C	Q	PJ	E	EJ
No. competitions	57	48	57	45	53	22	11	17	15
Total number of entries	1964	353	1239	122	483	110	34	525	113
No. competitors scoring points:									
in 1 event	167	32	78	10	43	12	3	42	9
in 2 events	87	17	56	6	28	4	5	25	11
in 3 events	42	10	39	4	14	2	2	14	5
in 4 events	25	5	19	4	9	4	1	5	4
in 5 events	13	5	15	2	5	1	0	4	0
in 6 events	9	3	7	1	1	1	0	2	0
in 7 events	7	1	4	1	1	0	0	2	0
in 8 events	5	1	3	0	1	0	0	1	0

F1	A	AJ	B	BJ	C	Q	PJ	E	EJ
in 9 events	3	0	3	0	0	1	0	2	0
in 10 events	2	2	1	0	0	0	0	1	0
in 11 events	0	0	0	0	1	0	0	0	0
in 12 events	0	0	0	0	0	0	0	0	0
in 13 events	1	0	0	0	2	0	0	0	0
in 14 events	1	0	1	0	0	0	0	0	0
in 15 events	2	0	0	0	0	0	0	0	0
in 16 events	0	0	1	0	0	0	0	0	0
in 17 events	1	0	0	0	0	0	0	0	0
Total number of competitors scoring World Cup points	365	76	227	28	105	25	11	98	29

World Cup 2014 F1A

1	Jama Danier	CAN	218	KW-1 NO-3	HN-1 ZA-5	SE-1	MC-1	IC-1	SC-1	KU-1	HC-1	SA-2	PR-2	RH-2	AC-2	NA-3
2	Roland Koglot	SLO	217	SA-1 NA-11	MS-1 IK-10	SM-1	RH-1	ZA-1	HO-1	CT-1	HG-2	SB-2	MM-2	MC-2	SL-3	KW-3
3	Anton Gorsky	RUS	207	NA-1 EA-11	DK-1 SE-7	AM-1	SL-2	KW-2	NO-4	EL-4	HG-10	MM-12	SA-20	ZA-20	NL-14	
4	Aviv Balassiano	ISR	195	MM-1	RB-1	EQ-1	KZ-3	SH-3	PI-4	ZA-4	SA-6	HG-9	SL-14	KW-14	HN-14	NA-15
5	Per Findahl	SWE	189	SL-1	BD-1	NO-2	ZA-2	MM-3	SA-3	DK-3	KW-7					
6	Mikhail Kosonozhkin	RUS	187	KZ-1 SL-5	NO-1 EA-9	SZ-2 BD-6	SE-3 DK-16	RH-3	HG-4	MC-4	NL-7	JI-6	EL-5	SB-10	HN-9	HM-7
7	Borislav Bardarov	BUL	167	SF-1	DZ-1	IC-2	MS-5	NA-8	BU-8	SM-12	MC-18					
8	Dirk Halbmeier	GER	157	BU-1	SE-2	PI-3	DK-4	RB-5	KZ-20	NO-6						
9	Rudolf Holzleitner	AUT	155	KZ-2	RB-2	MS-3	IK-3	LJ-4	SA-11	JI-16	HO-16					
10	Thomas Weimer	GER	155	AL-1	MS-2	BU-3	RB-4	PI-5	KZ-7	ZA-6	SA-8	SE-15				
11	Matija Hrast	SLO	147	PR-1	IK-2	SA-4	SM-7	MS-8								
12	Ivan Bezak	SVK	143	LJ-1	DK-2	KZ-5	SZ-8	SB-12	HG-14	SA-17	NO-19	SL-16	BD-16			
13	Sergey Makarov	RUS	137	EL-2	NL-3	MM-4	KW-4	NA-7	EA-22							
14	Robert Lesko	CRO	133	IK-1	ZA-3	SA-5	RH-5	KW-10	PR-16	MM-19						
15	Brian Van Nest	USA	131	AC-1	TU-2	CN-5	SC-5	NA-13	MM-15							
16	Luka Biteznik (J)	SLO	129	SZ-1	MC-3	SM-6	PR-9	IK-9	CT-8	MS-19						
17	Bostjan Bagari	SLO	121	HO-2	MS-4	IK-4	MC-7	ZA-8	SZ-10	BD-11	SA-14	LJ-18	PR-18			
18	Yuri Titov	RUS	121	HM-1	HG-3	EL-6	ZA-16	NL-19	EA-21							

World Cup 2014 F1B

1	Alexander Andriukov	USA	203	MM-1	EF-1	HN-1	CN-2	KW-8								
2	Bernd Silz	GER	199	DK-1	SL-1	HO-1	SB-2	SZ-5	LJ-4	EF-7	NO-7	SA-7				
3	Anatoliy Rybchenkov	RUS	194	MC-1	HM-1	IC-1	DZ-2	NL-3	ZA-3	HN-4	EA-5	EL-5				
4	Svetozar Gostojic	SRB	192	MS-1	SM-1	DZ-1	MC-2	SZ-11								
5	Evgeny Gorban	UKR	178	PT-1 VS-9	RB-1 AN-8	ZA-2	SA-3	HV-3	KW-4	NA-4	JI-4	MC-4	PR-4	LC-5	RH-10	
6	Adam Krawiec	POL	176	SA-1	BD-1	KZ-2	RB-2	JI-3	HG-4	HO-4	SB-9	SL-6				
7	Timur Useynov	RUS	170	HG-1	AM-2	HM-2	EA-3	KA-3	SL-4	SA-13	NL-6	SZ-17	BD-6			
8	Stepan Stefanchuk	UKR	167	LJ-1	EF-2	BD-1	CB-3	SB-5	AN-5	VS-7	HV-10					
9	Ismet Yurtseven	TUR	166	VS-1 KW-15	IC-2 DK-16	SF-2 SL-12	SZ-3 HG-8	AL-3	MM-7	EF-6	SE-6	HV-6	CT-6	BD-8	NO-10	
10	Mihaly Varadi	HUN	165	ZA-1	SA-2	SM-2	KZ-3	SL-8	RB-7	SZ-19						
11	Radoje Blagojevic	SRB	163	PR-1	IK-2	MS-2	DZ-3	SF-4	SM-4	MC-5	ZA-7					
12	Igor Vivchar	UKR	158	AN-1	HV-2	EF-3	HN-3	MM-20								
13	Vin Morgan	AUS	151	SC-1	AC-1	KU-3	NA-9	MG-7	MM-23	KW-22						
14	Mickael Rigault	FRA	150	EQ-1	SH-2	RH-3	SB-4	BD-11	EF-22							
15	Alex Kulakovsky	UKR	144	SZ-2	AN-2	LC-2	EF-9	HV-9	VS-10							
16	Walt Ghio	USA	140	NA-1	SR-1	CN-4	DK-17	MM-8								
17	Oleg Kulakovsky	UKR	134	SZ-1	LC-3	EF-4	HV-5	AN-7								
18	Andrey Burdov	RUS	126	AM-1	SL-2	NL-11	HG-12	KW-19	EL-15							
19	Viktor Rosonoks	LAT	124	NO-1	SE-4	CT-4	EF-11	DK-5								

World Cup 2014 F1B-Junior

1	Dawid Lipski	POL	201
2	Bojan Gostojic	SRB	200
3	Clement David	FRA	200
4	Bartolomiej Bilewicz	POL	190
5	Pavel Lomov	RUS	182
6	Kacper Lukaszewicz	POL	180

World Cup 2014 F1C

1	Vladimir Sychov	SLO	205	RB-1	BD-1	MC-1	ZA-1	PR-1	CB-1	KZ-2	JI-3	AN-3	SZ-4	SA-7	VS-4HV-4
2	Nikolay Rekhin	RUS	205	NL-1	HO-1	KA-1	MK-1	PR-2	SL-3	HN-3	MC-4	HG-6	EA-2	EL-7	
3	Artem Babenko	UKR	198	MM-1	KW-1	HM-1	HN-2	LC-2	EA-4	NA-4	EL-9				
4	Alan Jack	GBR	185	HG-1	NA-1	SH-2	EQ-2	MM-3	KW-6						
5	Reinhard Truppe	AUT	184	SM-1	CT-1	JI-2	HO-2	HG-3	NA-3	KZ-3	MC-3	PR-3	IK-3	MM-4	KW-4SA-6
6	Alexei Talanov	RUS	170	EA-1	NL-2	HG-2	SL-4	EL-11							
7	Andrea Banci	ITA	165	RH-1	SZ-2	CT-2	SA-3								
8	Roy Summersby	AUS	163	SC-1	KU-1	MM-2	NA-6	MG-5							
9	Dmitriy Stakhanov	UKR	154	SB-1	HV-1	AN-1	VS-2	LC-4							
10	Darijo Jermol	CRO	152	MS-1	MC-2	SM-3	ZA-3	SA-5							
11	Jerzy Wlodarczyk	POL	147	LJ-1	SB-2	HO-3	KZ-4	BD-4	SZ-5	RB-6					
12	Viacheslav Aleksandrov	UKR	146	VS-1	LC-1	SL-2	AN-4	CB-2							
13	Marek Roman	POL	141	KZ-1	BD-2	RB-4	SB-5								
14	Michael Sondhauss	GER	141	JI-1	EF-2	SB-3	SL-9								
15	Ken Faux	GBR	133	SL-1	EQ-1	SH-3									
16	Alexander Drozdov	RUS	118	SZ-1	HG-4	SB-6	HM-7								
17	Franco Gradi	ITA	112	BD-3	CT-3	SA-4	ZA-4								

World Cup 2014 F1P-Junior

1	Taron Malkhasyan	USA	150
2	Daniel Bogomaz	POL	100
3	Alexandr Kuznecov	RUS	92
4	Sarmat Mamitov	RUS	92
5	Dmitri Safronov	RUS	72

World Cup 2014 F1A-Junior

1	Mikhail Lomov	RUS	213
2	Luka Biteznik	SLO	197
3	Jernej Jurhar	SLO	188
4	Alexey Khoroshev	RUS	181
5	Amit Kidron	ISR	174
6	Samuel Zachara	SVK	172
7	Daniel Rossler	CZE	156

World Cup 2014 F1Q

1	Zeljko Grepl	CRO	202
2	Ron Assmuss	GER	172
3	Gabor Milak	HUN	162
4	Ian Kaynes	GBR	160
5	Bernie Crowe	USA	152
6	Andras Jancso	HUN	150
7	Andreas Lindner	GER	123

Key to contests and numbers flying in each class:

			A	AJ	B	BJ	C	Q	PJ
KW	Kiwi Cup NZ	USA	56	6	47	2	15	8	1
NA	North American	USA	50	1	45	1	13	0	1
MM	Maxmen	USA	58	5	66	2	18	6	1
EA	Euro & Asia	RUS	67	20	53	13	28	0	11
NL	Naloev Cup	RUS	68	17	50	10	28	0	9
PI	Passover Open	ISR	40	10	18	3	5	0	0
KU	Kotuku Cup	AUS	10	0	12	0	3	0	0
SC	Southern Cross	AUS	11	0	13	0	4	0	0
LJ	Mem.L.Janacik	SVK	46	12	18	3	3	0	0
AC	Australian FF Ch	AUS	9	0	13	0	3	0	0
SF	Sofia Cup	BUL	24	8	11	3	3	0	0
SB	South Bohemian	CZE	64	12	32	4	11	0	0
SZ	Szabo Miklos	ROU	58	15	49	5	14	4	0
BD	Budapest Cup	ROU	60	17	32	3	10	3	0
IC	Istanbul FF Cup	TUR	11	2	12	2	0	0	0
LC	FF Latvia Cup	UKR	14	3	11	0	9	0	0
SM	31st Srem Cup	SRB	43	22	10	3	11	5	0
KA	Kazakhstan Cup	KAZ	11	1	10	0	4	0	0
MK	Mihail Knyazev	RUS	15	1	7	0	4	0	0
SE	Swedish Cup	SWE	45	2	38	2	8	7	0
DK	Danish Cup	SWE	41	2	35	2	7	7	0
NO	Norwegian Cup	SWE	42	2	34	2	6	9	0
CC	Centennial Cup	USA	5	0	4	1	0	4	0
EL	Elbrus Cup	RUS	40	8	32	4	26	0	6
AN	Antonov Cup	UKR	11	1	16	1	7	0	0
TU	Tui Cup	USA	5	0	4	1	0	3	0
CB	Commonwealth	UKR	5	1	7	1	5	0	0
MS	Mostar Kup	BIH	45	13	13	2	4	6	0
HC	Huron Cup	CAN	4	0	4	0	2	0	0
MG	Mongolia Cup	MGL	28	5	21	0	9	0	1
AL	Anatolian Cup	TUR	10	0	7	0	0	0	0
HG	Harghita Cup	ROU	76	18	32	2	17	3	0
PT	Poitou	FRA	44	5	32	4	10	0	0
SL	Salonta Cup	ROU	78	14	35	2	18	0	0
IK	Izet Kurtalic	BIH	37	11	14	1	5	0	0
KZ	Kietrz Cup	POL	50	8	17	4	11	9	1
RB	Raciborz Cup	POL	48	10	16	4	14	8	1
EF	45th Eifelpokal	GER	66	3	46	1	12	3	0
HM	FF Hol Mongolia	UKR	19	2	12	1	15	0	0
VS	Victor Stamov Cup	UKR	12	1	19	2	11	0	0
HV	FF Hol Latvia	UKR	12	1	19	2	10	0	0
BU	Bulgaria Cup	BUL	27	10	6	3	3	0	0
HO	Hogo Cup	SVK	32	6	10	3	5	0	0
AM	Almaty Cup	RUS	22	3	15	1	6	0	1
SH	Stonehenge Cup	GBR	25	0	12	0	6	4	0
EQ	Equinox Cup	GBR	24	1	9	0	3	3	0
PR	Prilep Cup	MKD	46	9	20	3	6	1	0
MC	Macedonia	MKD	42	9	21	4	8	1	0
Ji	Jihocesky pohar	CZE	62	13	26	5	8	0	0
CT	Città di Capannori	ITA	19	2	18	1	7	4	0
CN	Canada Cup	USA	15	0	17	0	5	0	0
SR	Sierra Cup	USA	14	1	14	1	5	0	1
SA	CRO Cup Siscia	CRO	51	11	26	2	13	9	0
DZ	Djordje Zigic	SRB	14	4	5	1	3	0	0
ZA	CRO Cup	CRO	40	8	24	2	7	3	0
RH	Rhône Alpes	FRA	42	7	27	2	5	0	0
HN	Hanukkah Open	ISR	51	10	23	1	10	0	0

GRANDE COUPE DE BIRMINGHAM, NORTH LUFFENHAM, DEC 7

Report by Gavin Manion

We had a challenging and closely fought “Grande Coupe de Birmingham” on a cold windy day. The day started with a heavy rain shower and around lunch time (not many managed lunch!) we had a brief shower of sleet! Otherwise the day was bright and sunny but felt cold in a strong westerly wind.

Upwind turbulence (and the need to get competitors out of their warm cars and flying!) prompted the contest director Kris

Best to set an initial 90 seconds max. By round 3 it was clear that this was sufficient to decide the contest and it was maintained at 90s to the contest close. This proved a good (and popular) decision on the day and many competitors continued to fly to the end.”

F1G 15 flew

1	P Ball	434
2	I Davitt	411
3	P Brown	409
4	W Dennis	402
5	A Moorhouse	389
6	M Marshall	325
7	D Chavenard D	270 (FRA)

Vintage Coupe d'H 7 flew

1	G Ferer	250
2	D Thompson	218
3	P Tolhurst	210
4	D Davitt	207

Special award: Best result in both events - Peter Tolhurst

SOUTHERN COUPE LEAGUE

From Peter Hall

Here are the dates and venues for the league events for 2015. Notice the perfect spread throughout the year. The BMFA Technical Committee are allowing the Coupe event on May 3rd on Salisbury Plain to run alongside, but distinct from the Stonehenge Cup programme. Hence its name ‘Not the Stonehenge Cup’. This gives us eight events, out of which five of your highest scores will count.

February 8	1st Area, Ashdown Forest, Beaulieu, Merryfield, Salisbury Plain
April 19	London Gala, Salisbury Plain
May 3	Not the Stonehenge Cup, Salisbury Plain
June 21	Oxford Rally, Port Meadow
July 18	Odiham
August 22	Southern Gala, Salisbury Plain
September 20	Crookham Gala, Salisbury Plain
November 15	Coupe Europa, Middle Wallop (TBC)

The sub-committees and working parties of the Southern League Action Group (S.L.O.G) are always beaver away examining and seeking to improve all aspects of our work in readiness for the new season. I summarize two recent reports.

Scoring Systems

We have been concerned for some time that our scoring system should properly acknowledge the widely differing challenges the events provide. It cannot be right that you can be awarded twelve points for winning a competition with only three entries, three rounds and a DT fly off at Middle Wallop on a nice day, and the same for beating a field of twenty, with five rounds, and a fly-off on a wet and windy day on Salisbury Plain. Our working party has considered all possible variables and appropriate score enhancements and penalties. The proposed new system however has exceeded our present computing capacity and so we have decided to leave things as they are.

Prizes.

Prizegivings are now mostly informal little affairs and distinctions between first, second and third have been elided. A bottle of wine for each. We occasionally catch a glimpse of aeromodelling’s glory days at SAM 1066 champs, for instance. Tables laden with giant silver trophies resplendent with winged victories and draped with swags, tarnished now and unloved, dug out from one attic to be interred in another. For it no longer seems appropriate to carry home such proud memorials of success when only three entered the competition. Has the pendulum swung too far? Surely the awards should distinguish between the three top places. Our working party considered this. They rejected matching the quality of the wine - good, decent and plonk, to the placings, on the grounds of expense, and since most modern reasonably - priced bottles taste the

same (to me anyway) no-one would notice the difference. In any case we shouldn't be encouraging drinking. Soft drinks as prizes were considered juvenile and would seem to undervalue even the most modest success. If not drinks, what about food? A shoulder of lamb? Or considering the ecological footprint, a tray of mixed veg. locally sourced? I know what you are thinking, this is getting ridiculous. Well you think of something then.

And finally, what of the new season ? What innovations? We may not see much until graphene enhanced structures and 3D printers become realistic prospects. Except, of course, for electronic developments. Electronic timers for Coupes and RDT will spread no doubt. Are we going to see the resurgence of the true free-flight Coupe - non-automated, no systems? Alan Brocklehurst won the league last year with one and has its successor ready for this season. Consider the advantages. Systems malfunction and mis-setting account for a depressingly high number of failures so the simpler the better. Summer boomer-proof DT is easy to build in (tip up wing and tail) Why after all, do we use VIT /WW/ AR ? To make best use of the burst, yes, but using four degrees plus of right sidethrust and some left fin tab will give you the control necessary. Many vintage model fliers use this trim to great effect instead of the more tricky PGI method. You may object that the left glide takes you out of the thermal you've so cleverly launched in. I've not noticed any difference with vintage models. Perhaps I'm overselling this. I've always flown auto-coupes and maintained their superiority. But I now think any advantage is small and easily eclipsed by systems failures. Better to practice air-picking. That, of course is the secret.

UK COMPETITION NEWS

OXFORD MFC FREE FLIGHT RALLY will be at Port Meadow, Wolvercote, Oxford on June 20 and 21. 'Champagne flyoffs' for FIG, FIH, and HLG/Catapult will start at 6.30pm on the Saturday. Flying on Sunday starts at 10am with the following events:

Flown to 5 flights in rounds from a line: FIG, FIH, E30/P30/CO2 combined.

Flown with 3 flights from line with no rounds will be: vintage rubber (34" max span), vintage/classic glider combined, tailless rubber/glider combined, Hi-start glider (36" max span), and HLG/Catapult combined which will be flown from a box 7 flights.

Glider will use 50m towlines, vintage gliders 10 sec flight bonus. Hi-start gliders launching line 30m including 7.5m rubber. No thermistors, streamers on poles, bubbles, etc. No i/c power models to be flown. All flyers must be insured. Contact: Andrew Crisp, 4 Grove Street, Oxford OX2 7JT tel 01865 553800.

CROOKHAM GALA will be held on Sunday September 20 on [Salisbury Plain](#). The following classes will be flown:

- George Fuller power for the George Fuller trophy. Any George Fuller design, 12 sec run without functions, 7 seconds with.
- Coupe d'Hiver, combined ancient and modern for the Crookham FIG trophy. Prize for highest placed vintage Coupe.
- Combined glider to BMFA rules
- E36 to BMFA rules
- Combined chuck/catapult glider

Contact Roy Vaughn roy.vaughn@btinternet.com 01344 779071.

FREE FLIGHT ON SALISBURY PLAIN

[Salisbury Plain](#) will be available again for Free Flight flying on most weekends of the 2015. All types of Free Flight - both contest and sport are welcome but you must apply for a permit and be on the security list to take advantage of this facility.

The terrain is undulating, high down land with access via 'hard' tracks. To apply for a permit/ security list placing, please send an SAE, a Cheque for £15.00, and your BMFA details to Trevor Grey at 21 Claremont Road, Tunbridge Wells, Kent, TN1 1SY.

In addition you **must** send your e-mail address for notifications to: trevorgrey@talktalk.net. Though available for the majority of weekends there will some occasional periods when the facility is **not** available. You will be notified of the availability by e-mail. When your permit is returned you will also receive some simple rules on operating (which you must follow) plus details of location and access.

NITROMETHANE

Under new rules the Home Office requires a permit to be held for supplying or possessing nitromethane, at a cost of £39.50 for 3 years. This is apparently because of its use in making TNT. See:

<https://www.gov.uk/government/publications/licensing-for-home-users-of-explosives-precursors/licensing-for-home-users-of-explosive-precursors>

NOTICEBOARD

WANTED. Gavin Manion needs a battery box (the replaceable AA cell type) for a Standard C156 transceiver as he lost his in a field in central France this November!

If you've got a dead C156 lurking in a drawer Gavin would happily send you the postage and payment, or make a donation to a chosen charity if you prefer.

Contact gavin.manion84@gmail.com

FOR SALE BY JOHN CARTER. M&K models surplus to requirements. The following models have been sitting in my model box and unused for some time:

1x Short mechanical model . Good flying condition icarex covering £450

1x Long mechanical model . Good flying condition icarex covering £450

1x E long electronic early lead type timer v /good condition icarex /profil covering, single servo. £900

Can do a discount for multi purchase, can post /ship to any country (at additional cost). Payment by cash, cheque, or Paypal. Contact; John Carter at carterbuild@yahoo.co.uk or nordicf1a@gmail.com phone 00441782398816 .mob 00447725164372

CIAM CALENDAR 2015

Mongolia's membership of the FAI has been confirmed for 2015, following payment of their outstanding FAI membership fees. Thus the 2015 F1ABC World Championships go ahead as planned.

The full CIAM Calendar has just been published on the FAI website. However, I have questions about all the omissions from the original list (in FFN last month), so watch the FAI website for updates.

Two events have now added electric classes to their lists of events published last month:

Poitou Moncontour 2 min will include E36,
North American Cup will include FIQ.

FFN INDEX 2014

Not listed here are UK and International Competition News.
Location shown as page/month

MODEL DRAWINGS

F1A	Flatpack	Andrew Crisp	88/10	F1H	F9c	Michal Chudoba	32/4
F1A	LDA 2013	Mikhail Kosonoshkin	102/11	BMFA 50g rubber	No.4	Ivan Taylor	12/2
F1A		Jiri Nahlovsky	56/7	P30	Mistr P	Bohuslav Ryz	28/4

ARTICLES AND NOTES

An Inexpensive Altimeter	100/11
Asian Oceanic Champs	82/9
Barkston Heath	9/1, 26/3
BMFA Free Flight	
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98/10	
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Ron Firth

9/1	
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Joe Flynn

108/11	
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John Godden

9/1	
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Georges Matherat

12/2	
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Ron Pollard

52/6	
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Salisbury Plain Area 8

9/1	
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46/6	
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54/7	
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59/7	
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86/9	
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18/2	
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Coupe Europa, Middle Wallop, Dec 8

4/1	
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HLG Ceminac, Croatia, January 25

12/2	
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Isaacson events, Lost Hills, Feb 8-9

23/3	
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Kiwi Cup, Lost Hills, USA, Feb 8-10

20/3	
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North American, Lost Hills, USA, Feb 12

21/3	
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F1E at Lost Hills, USA, Feb 12-13

22/3	
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Maxmen, Lost Hills, USA, Feb 13-17

21/3	
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Koplas Pro, F1N, Serbia, February 23

26/3	
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BMFA 1st Area Meeting, February 23

34/4	
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F1E Hranice, Czech Rep, Mar 1-2

23/3	
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BMFA 2nd Area Meeting, March 16

34/4	
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BMFA 3rd Area Meeting, April 6

41/5	
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Euro & Asia Cup, Russia, April 11-15

50/6	
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Naloev Cup, Russia, April 15-19

50/6	
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Northern Gala, N Luffenham, Apr 18

49/6	
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Crookham Gala, Salisbury Plain, Apr 20

41/5	
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Kotuku Cup, Australia, April 23-24

50/6	
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Southern Cross Cup, Australia, Apr 25

50/6	
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Croydon Wakefield, M. Wallop, Apr 27

42/5	
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L.Janacik Mem, Slovakia, Apr 26

50/6	
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Australian FF Champs, Apr 27-May 1

50/6	
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South Bohemian, Czech Rep, May 2-4

51/6	
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Sofia Cup, Pazardzik, Bulgaria, May 2-4

51/6	
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Szabo Miklos, Salonta Romania, May 10

51/6	
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Budapest Cup, Salonta, Romania, May 11

51/6	
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F1E Turda, Romania, May 24-25

52/6	
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BMFA FF Nats, Barkston, May 24-26

47/6	
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BMFA F1E, June 1

52/6	
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Istanbul Cup, Vize, Turkey, June 6-8

55/7	
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Oxford Rally, Port Meadow, June 7-8

58/7	
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Srem Cup, Zrenjanin, Serbia, June 14

55/7	
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BMFA 4th Area Meeting, June 15

58/7	
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Mihail Knyazev, Samara, Russia, Jun 20

55/7	
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BMFA Team Trials 1, Salisbury, Jun 21

62/8	
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F1E, Monti Lessini, Italy, June 21-22

57/7	
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Swedish Cup, Rinkaby, Sweden, Jun 26

85/9	
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Danish Cup, Rinkaby, Sweden, June 27

55/7	
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BMFA East Anglian Gala, Sculthorpe,

June 28-29	61/8, 84/9
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Norwegian Cup, Sweden, Jun 29

57/7, 61/8	
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BMFA F1E, Burrough Hill, July 6

62/8	
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Centennial & Tui Cups, USA, July 10

82/9	
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Antonov Cup, Ukraine, July 11-12

61/8	
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Mostar Kup, Bosnia-Herzegovina, Jul 12

61/8	
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Commonwealth Cup, Ukraine, July 12

61/8	
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BMFA 5th Area Meeting, July 13

62/8	
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Huron Cup, Ontario, Canada, July 19

61/8	
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Annual Rally, RAF Odiham, July 19

63/8	
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Mongolia Cup, Ulaanbaatar, July 19-24

83/9	
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London Gala, Salisbury Plain, Jul 26-27

83/9	
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Beauvoir Azay Le Brule, August 2-3

86/9	
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Anatolian Cup, Turkey, August 2-3

91/10	
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Moncontoutour 2 min, France, Aug 7

93/10	
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Poitou, Noizé, France, August 8-9

85/9	
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Harghita Cup, Salonta, Romania, Aug 8

85/9	
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Salonta Cup, Salonta, Romania, Aug 9

85/9	
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BMFA 6th Area Meeting, August 10

84/9	
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Timperley Gala, N Luffenham, Aug 17

84/9	
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Izet Kurtalic, Bosnia-Herzegovina, Aug 23

91/10	
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Martin Cup, Slovakia, Aug 24

86/9	
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Nosko, Martin, Slovakia, Aug 29

86/9	
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Southern Gala, Salisbury Plain, Aug 30

95/10	
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Kietrz Cup, Kietrz, Poland, Aug 30

92/10	
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Raciborz Cup, Poland, August 31

92/10	
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Eifelpokal, Züllich, Germany, Sep 4-7

92/10	
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FF Hol Mongolia, Ukraine, Sept 5-6

93/10	
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