

FREE FLIGHT news

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FFn DIARY

October 5-6 Padule di Bientina, Italy	13th Trofeo Citta Di Capannori. F1A F1B F1C F1Q. World Cup event. Contact: Fabrizio Ceccarini / Cesare Gianni, tel: +39 347 430 8840 / +39 335 587 4188, email: f_ceccarini@tin.it cesaregianni2@gmail.com web: http://www.asdvoli.it	October 27 Las Vegas, USA	Boulder City World Cup. F1A F1B F1C F1Q. World Cup event. Contact: Tom Loeger, tel: +1 702 293 4090, email: tgioerger@cox.net web: http://richardsdon_r_m@me.com
October 6 Area Venues	BMFA 8th Area. event. CG Team (Model Engineer/Plugge), C/R, C/P, C/E, HLG/CLG F1B (Duce/Plugge), SLOP (Frog Senior/Plugge), Mini Vintage, E30. .	November 2-3 Peak District or near Melton Mowbray	BMFA 7th F1E Team Selection. May be either or both days. Contact: Ian Kaynes 01252 512538. kaynes@btinternet.com
October 10-24 Lost Hills, California, USA	Kotuku Cup of New Zealand. F1A F1B F1C F1E F1P F1Q. World Cup event. Contact: Brian van Nest, tel: +1 760 937 0177, email: bisheatfla@gmail.com web: http://sen.faireeflight.org	November 17 Daventry	BMFA Free Flight Forum. Start 10am. At Mercure Daventry Court Hotel, Sedgemoor Way, Daventry NN110SG. See FFn1910
October 11-14 Lost Hills, California, USA	Sierra Cup. F1A F1B F1C F1Q F1E. World Cup event. Contact: Mike McKeever, tel: +1 321 663 8599, e: vamckeever@aol.com	November 8-10 Sentjernej, Novo mesto, Slovenia	Krka Cup. F1A F1B F1C. World Cup event. Contact: Dragan Stankovic, tel: +386 41 860891, e: aeroklubkrka.fl@gmail.com web: http://www.aeromodelarstvo.si
October 12-13-14 (actual date tbc) Buckminster	BMFA Buckminster Free Flight Gala. Small Field Free Flight Classes to be confirmed. Contact John Ashmole 01406 370188 johnashmole@yahoo.co.uk	December 1 North Luffenham	Grande Coupe de Birmingham. See FFn 1909. Start 10.00, F1G 2 flights 10.00-12.00 then 3 rounds. Pre'58 Vintage Coupe 3 flights no rounds 10.00 to 14.45. Contact Gavin Manion gavin.manion84@gmail.com tel 01543 422509 or Stuart Darmon stuardarmonfla@yahoo.com 01858 882057
October 17-22 Lost Hills, California, USA	World Championships F1A F1B F1C. Contact: info.2019usfaiffwc@gmail.com web: http://modelaircraft.org/events/fai-world-championship	November 23 Belisce, Croatia	F1N Indoor Open Belisce. F1N. Contact: Antun Sikic, tel: +385 31 208 262, email: asikic@gmail.com http://www.ak-osijek.hr
October 19 (Saturday) Salisbury Plain	Croydon Coupe Europa. Details to follow. Contact: Ray Elliott, tel 0208 997 7745 ray.elliott8@btinternet.com	December 26-28 Orim, Israel	Dec 26: Negev Open; Dec 27-28 Hannukkah Open F1A F1B F1C F1P F1Q. World Cup event. Contact: Aviad Levy, tel: +972 3 517 50 38, fax: +972 3 517 72 80, email: aviad@aeroclub.org.il web: http://www.aeroclub.org.il
October 26 (Saturday) Barkston Heath	BMFA Midland Gala. F1H, F1G, F1J, BMFA1/2A, E36, P30, SLOP, Mini Vintage, HLG-CLG. Contact: Phil Ball 07470 177947 phil.ball@ntlworld.com	March 26-29 Slanic, Romania	2020 F1D Indoor World Championships
October 26 Slavonski Brod, Croatia	2nd Indoor Open Slavonski Brod 2019. F1N. Contact: Igor Nisevic, tel: +385 352 50 262, email: aeroklubrod@gmail.com web: http://www.ak-brod.hr		

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Compiled and produced by Ian Kaynes

UK TEAMS FOR WORLD CHAMPIONSHIPS

First, the F1A team for Lost Hills. **John Williams** writes:

"My preparations this year have gone well, and by the time of the champs I would have flown over 250 test flights since January. All Championships never fall at a good time of the year and because this one is at the end of the year I have not always flown my best models in wind at contests, but decided to save them which always comes to the detriment of winning. This year, this happened at the British Nationals on a windy FIA day when I decided to leave the best models in the box resulting in another second place by a few seconds.

I now have to agree with all the good guys, that flying LDA's is the way forward and to that end, for the first time, the five models I will take to the USA will all be LDA's. The wing sections have improved over the years and the models are now more stable on tow, also glide performance is better. It would appear height is everything. I will take three short open structure models, one long carbon model and one long carbon flapper. All these models are supplied to me by Anton Gorskiy. I am very fortunate to have Anton's help by phone to support me through the software setups, an area in which I struggle with.

This year we have three very strong teams. We also have an excellent Management team and hopefully we should be in with a chance of team medals."

From **Richard Jack**:

"I'll be heading to Lost Hills with six models. All of the models are built by my dad, Alan Jack, with a little input from me. Thanks as always to him. I think it's a remarkable effort on his part to produce and innovate several FAI models each year, and it adds a lot to my enjoyment of free flight to fly models that we have created.

For the rounds I'll be flying two models with a section reminiscent of a non-folding power model, a symmetrical entry, but thinner and with more camber than a generation 1 LDA model. One of these, number 29, has been the model I've flown most over the past several years. It's nice to tow, has a pretty good launch height (85-90m) and most importantly flies very stably in strong and light lift. It has been joined by a sister ship, number 37, this year.

In addition I will be taking three long models, all designed for use in light or no-lift conditions. Each is of a different design, number 31 features a leading edge flap designed to give a symmetrical entry for launches and more camber during glide. I flew no.31 in the fly-off at last year's Euro champs. It's been joined this year by two new trailing edge flappers, numbers 36 and 38. Neither have been flown enough to work them up to a really competitive trim yet, but I hope they'll be competitive based on my experience with my previous flapper.

Finally, I'm looking forward to my first visit to one of free-flight's 'must visit' fields and competing again with the UK team."

John Cooper:

"I thought that my World Champs efforts had ended after France in 2013, but the lure of flying at my favourite site of Lost Hills was something I couldn't miss and I was fortunate enough to qualify for the GBR team again.

I'm planning to take six models with me. Two fairly old M&K style short models which have been so reliable for me over the years, two models with Gorsiky short LDA wings and tails but with fuselages from other sources. All of these four models have Black Magic timers and are now equipped with Massimo's Pyxis GPS units. To complete the six I'll have a

Gorsiky short and long model. These have been flown but are not yet consistent - with the problem being my running speed and launch technique - more practice needed!

For strategy at the Champs, I'm expecting to be using an LDA for the first 2 rounds, but could easily swap back to one of the old M&K style models for the remaining rounds since, in my view, these still handle thermals better than more modern models.

In France I dropped 1 second by landing on top of the sunflowers, hence hoping to avoid a similar fate at Lost Hills!"

Moving to F1B, **Mike Woolner** writes:

"The main challenge for me this year is keeping up with the significant enhancement of performance which has taken hold of the F1B class during the last few years. The World Cup circuit provides a good opportunity to see how the top fliers and their models perform. The rubber we use is now consistently good, and I've tooled up, so to speak, with the latest models from the Stefanchuk and Andriukov stables. These models are going well, although I have still not fine tuned them to the extent I would like. However, the now significant opposition, in the form of F1B fliers around the globe, and who also have the benefit of these advantages, are becoming increasingly difficult to beat. Having flown in Lost Hills earlier in the year, in February, I can gauge the margin of improvement I need to achieve to be able to beat the best, and it is an achievable, but nonetheless difficult exercise, especially with the limited calm weather trimming opportunities we tend to have in the UK. However, this cannot be an excuse, and, hopefully, the lead in time before the Champs will assist me in my quest for further fine tuning and tweaking. We have a good F1B team and there is no reason why we cannot achieve medal success."

The F1B team is completed by Pawel Pietrzak and Phil Ball.

From the F1C team, **Alan Jack** writes:

"I shall be taking 5 models; no's 40 to 44.

40 is a double flapper and is my reserve. It was fortunate to survive being pulled out of a tree last weekend. It climbs and transitions well but the glide is not so good.

41 is an all carbon flapper and it's capable of very good performance but it's been at the centre of some ugly stuff not at all its fault like for e.g. having its engine spit off the hub and spacers in Hungary last year when trying to start it.

No 42 is a carbon single folder. In its early life it had a horrible tendency to fly right out of lift culminating in the international in Romania where it climbed superbly through a cloud of thermalling models only glide straight ahead and execute a huge glide circle in the sink surrounding the lift. I hope a reappraisal of the tip alignments has cured that - it flew well in the first trials.

The last two 43 and 44 are carbon double folders. I flew 43 in the 2nd trials where it flew really nicely into lift. I flew 44 in the Equinox refining the trim as I went and it's fly off of just short of 7 was quite nice.

All my models are geared engine driven with a mix of Nelson's, older style Foras and two new style Foras. I am very aware of the "wet fish in the face" possibilities which fear is probably my 2nd biggest disadvantage after duff systems issues. The only thing in my models that I don't make myself are the engines, fun of course but it is concomitant with a huge need for testing to iron out the bugs coupled with good engineering and preparation none of which I have! But what the heck go have fun."

And from **Ken Faux**:

"I will be taking five models to Lost Hills, three flappers and two fixed wing models. All are powered by Verbitsky geared engines and use Sidus electronic timers and GPS. The only new model was actually finished a couple of years ago but has only recently been flown. This model features a flapped wing sourced from Artem Babenko with the hinge on the lower surface, covers over the flap joints and enclosed control mechanism. The weather this summer has been poor in the UK for trimming but recently we have fortunately enjoyed some good weather. This will be my 19th team place and I am hoping to perform to my maximum potential."

The F1C team is completed by Mick Lester. FFN sends the teams best wishes for success.

STONEHENGE CUP AND EQUINOX CUP, SALISBURY PLAIN, SEPT 7-8

Report by Peter Martin

As with 2018, the Stonehenge and Equinox Cups were blessed with fine weather and light winds on Salisbury Plain in Southern England. Saturday was overcast at times, but dry with 8-10mph winds, whereas Sunday had long sunny spells and windless periods between thermal fill-ins, with a need for 2 extended maximum rounds.

On Saturday afternoon, Stonehenge Cup F1C and F1Q classes were both settled by full scores, with Simon Dixon and Pete Watson showing great consistency. Chris Redrup and Trevor Grey were out of luck in Q, each dropping only a few seconds in Round 4. It was decided that the forecast suggested a possible still-air early Sunday flyoff for A and B classes. And so it proved, there was no wind at 7am with the temperature hovering in low single figures Celsius. In F1A, Emmanuel Ragot started a great weekend for the Ragot family, claiming the Stonehenge trophy with a near 7 minute effort. Mickael Rigault also began his weekend dominance in F1B, with a 10 second winning edge over countryman Richard Nouvian. Among the Brits, John Carter was 3rd in F1A and Russell Peers 3rd in F1B.

A very pleasant and enjoyable atmosphere during Sunday for the Equinox Cup resulted in another F1Q win with a full score for Pete Watson, using a former F1C wing on his electric model to good effect. A, B and C fly offs for the Equinox Cup began after 6pm on the Sunday, also in flat calm conditions. This time it was Ragot Junior's turn in F1A, with Capucin beating 2018 European Champion Per Findahl in the top 2 places, scoring 7.22 and 6.15 respectively. Mickael Rigault was unbeatable in F1B, this time a winning edge of 23s over Pawel Pietrzak (Britain's adopted Polish flyer). In the Equinox F1C fly-off, Alan Jack's all-carbon-wing folder executed a spot-on power pattern to triumph against Neil Allen's more conventional and high-climbing fixed-wing model.

Stonehenge Cup, Sept 7

F1A 14 flew

1	E Ragot	FRA	870	+406
2	B Trachez	FRA	870	+380
3	J Carter	GBR	870	+374
4	P Findahl	SWE	870	+323
5	G Bernard	FRA	870	+254
6	J Challine	FRA	842	
7	J Williams	GBR	834	

F1A-Junior 1 flew

1	C Ragot	FRA	727	
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F1B 11 flew

1	M Rigault	FRA	870	+385
2	R Nouvian	FRA	870	+375
3	R Peers	GBR	870	+309
4	B Marquois	FRA	870	+304
5	B Jacquemin	FRA	870	+289
6	P Ball	GBR	859	

F1C 4 flew

1	S Dixon	GBR	870	
2	K Faux	GBR	749	

F1Q 5 flew

1	P Watson	GBR	870	
2	C Redrup	GBR	865	
3	T Grey	GBR	851	

Equinox Cup, Sept 8

F1A 19 flew 11 full scores

1	C Ragot (J)	FRA	1020	+442
2	P Findahl	SWE	1020	+375
3	B Trachez	FRA	1020	+320
4	J Williams	GBR	1020	+301
5	J Pennington	GBR	1020	+291
6	J Carter	GBR	1020	+283
7	J Challine	FRA	1020	+232
8	B Clere	FRA	1020	
8	B Bernard	FRA	1020	
8	H Aukstakis	LTU	1020	
8	R Jack	GBR	1020	

F1A-Junior 1 flew

1	C Ragot	FRA	1020	+442
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F1B 12 flew

1	M Rigault	FRA	1020	+333
2	P Pietrzak	GBR	1020	+310
3	J Cheneau	FRA	1020	+278
4	B Jacquemin	FRA	1020	+270
5	M Woodhouse	GBR	1011	
6	M Woolner	GBR	987	

F1C 4 flew 2 full scores

1	A Jack	GBR	1020	+416
2	N Allen	GBR	1020	+349

F1Q 5 flew

1	P Watson	GBR	1020	
2	I Kaynes	GBR	919	
3	T Grey	GBR	852	

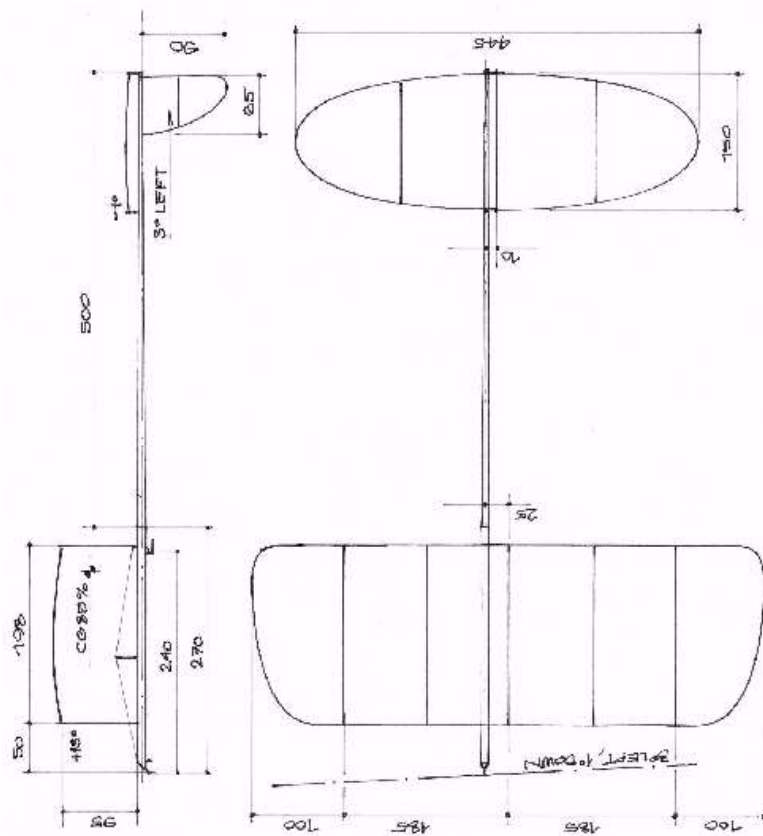
15TH F1E POITOU CHARENTE, TOURTENAY, FRANCE, SEPT 14

F1E 32 flew

1	A Trachez	FRA	500.00
2	H Desloges Bazile	FRA	495.56
3	A Trachez	FRA	487.78
4	A Winker	GER	472.23
5	W Hofs	GER	461.39
6	B Trachez	FRA	457.50
7	M Rigault	FRA	455.00
8	M Klaus	GER	453.89
9	R Champion	FRA	452.23
10	E Crosnier (J)	FRA	451.67
11	J Drapeau	FRA	450.00
12	T Laura (J)	FRA	448.06
13	P Chaussebourg	FRA	435.00
14	A Roux	FRA	416.67

F1E-Junior 5 flew

1	E Crosnier	FRA	451.67
2	T Laura	FRA	448.06
3	M Prodanel	ROU	413.33



FRONT VIEW



WEIGHTS (mg)

STICK	400
BOOM + RUDDER	220
STAB	140
WINGS	250
PROP	250
SPACER	60
TOTAL	1420

1st. PLACE, EUROCHAMPS 2019 IN SVETICE • CZECH REPUBLIC
Best. flight: 23.38 Rubber: Tan II 5/99 1.279m

F1D MODEL

IVAN TREGER, SLOVAKIA

DESCRIPTION OF MODEL

PARTS	Sizes in mm, Tubes & inside dia,	Density kg/m³
MOTOR STICK		
SHEET	0.35, 2x8000 0.8-380CLOCK, #6.3	65
BEARING	HARLAN ALUMINIUM	
REAR WHEEL	MUSIC WIRE 0.35	
WINGS	FRONT 1mm, REAR 0.8mm	100
DR. ROOT	1.5x1.5 > 1x1 x26	150
DR. WIRE	TUNGSTEN 0.025 (HARLAN)	
ROOTS	HM CARBON #1, INSERT IN GLASS FIBER.	
EXTENSION	TUBES #1/2	
	0.3 + CARBON TAPER 40mm, L=40	65
BOOM		
SHEET	0.20, 3x8000, 12.8, 80CLOCK, #6.3-3.5	62
ROOTS	1x1.5 x15	120
RUDDER	OUTLINE: SANDWICH 0.5x0.5	
	RIBS: SANDWICH 0.5x0.25, 5% CAMBER	
DIAB		
	2% CAMBER ARC	
OUTLINE	SANDWICH: 0.6x0.7 (CARBON ON SIDES)	
RIBS	SANDWICH: 0.7x0.25	
TUBES	1x1.5 GLASS FIBRIC	
WING		
SPACER	4% CAMBER ARC	
TUBES	SANDWICH: 0.3x1.5 > 0.7 (CARBON TOP + BOTTOM)	
RIBS	SANDWICH: 0.7x0.6 (CARBON ON SIDES)	
	SANDWICH: 1.2x0.25 - COMPRESSION RIIBS	
	1x0.3 - MIDDLE RIIBS	
	1x1.5 GLASS FIBRIC	
PROP		
	4470x610/1200	
OUTLINE	0.5x0.5	120
SPACER	1.6x1.6x0.5x0.5 + 4x8000 0.08	70
RIBS	SANDWICH 0.5x0.25, 5% CAMBER	
COVERING		
	OS FILM - ALL SURFACES	
SANDWICHES		
	BALZA A-GRAN (OS/10) + CARBON TUBES	
	30mm (FROM INSIDE CARBON SPREAD TO FABRIC	
	IN REAR)	
	GLASS - LAMINATED NATURAL, THEN CUT	
	TO THICKNESS WITH DIAMOND WHEEL IN A JIG.	
	CARD FABRIC 1600, TEXTURE ...	
CARD ROOTS		
	HM CARBON - CARBON TAPES FROM SPREAD	
	TO FABRIC 100mm (FRONT), TEXTURE ...	
	+ 2x GLASS FABRIC 1700mm	
GL. TUBES		
	2x GLASS FABRIC JOINT WINDING ON	
	THE TUBES (0.1, 0.1/2, 1.1/1.5)	

POITOU MONCONTOUR F1E, ST JEAN DE SAUVES, FRANCE, SEPT 15

F1E 31 flew

1	A Winker	GER	500.00
2	M Prodanel (J)	ROU	491.67
3	M Popescu	ROU	490.84
4	S Trachez	FRA	477.50
5	W Hofs	GER	475.00
6	C Trachez	FRA	471.66
7	T Laura (J)	FRA	469.16
7	R Masson	FRA	469.16
9	D Chevenard	FRA	457.50
10	H Desloges Bazile	FRA	448.33
11	M Klaus	GER	444.17
12	A Roux	FRA	444.15
13	E Crosnier (J)	FRA	436.66
14	A Besse	FRA	435.83
15	O Al Sloum (J)	FRA	432.50
16	M Tomazzoni	ITA	429.17

F1E-Junior 5 flew

1	M Prodanel	ROU	491.67
2	T Laura	FRA	469.16
3	E Crosnier	FRA	436.66

HOGO CUP, ZABOKREKY, SLOVAKIA, SEPTEMBER 21

F1A 45 flew 17 full scores

1	M Teterin	RUS	1020	+360	+388
2	Y Bichet	ISR	1020	+360	+347
3	T Horvath	HUN	1020	+360	+304
4	T Strobel	GER	1020	+360	+210
5	A Budimcic (J)	BIH	1020	+360	+110
6	V Sankin (J)	RUS	1020	+339	
7	E Sankin	RUS	1020	+335	
8	M Niiranen	FIN	1020	+331	
9	F Klobusicky (J)	SVK	1020	+314	
10	E Galor	ISR	1020	+297	
11	P Klobusicky (J)	SVK	1020	+280	
12	I Maskovszky	ROU	1020	+271	

F1A-Junior 8 flew 4 full scores

1	A Budimcic	BIH	1020	+360	+110
2	V Sankin	RUS	1020	+339	
3	F Klobusicky	SVK	1020	+314	

F1B 21 flew

1	R Mackus	LTU	1020	+360	+524
2	S Stefanchuk	UKR	1020	+360	+435
3	L Kryszczuk	POL	1020	+360	+425
4	E Pustoselov	RUS	1020	+360	+424
5	J Cihak	CZE	1020	+360	+399
6	P Polonec	SVK	1020	+360	+366
7	I Treger	SVK	1020	+360	+302
8	V Romanchenko	UKR	1020	+285	
9	O Ischenko	UKR	1020	+268	
10	V Hlozek	CZE	962		

F1C 5 flew

1	M Gasiorowski	POL	1020
2	J Roots	EST	990
3	E Burek	POL	981

ZABOKREKY CUP, ZABOKREKY, SLOVAKIA, SEPTEMBER 22

F1A-Junior 8 flew

1	A Mikolasek	SVK	540
2	A Budimcic	BIH	522
3	V Sankin	RUS	520

F1A 39 flew

1	E Galora	ISR	540	+335
2	V Polyayev	RUS	540	+329
3	A Gorskiy	RUS	540	+304
4	M Mandichev	BUL	540	+269
5	B Bagari	SLO	540	+187
6	M Zagora	CZE	540	+145
7	A Mikolasek (J)	SVK	540	
8	A Budimcic (J)	BIH	522	
8	E Sankin	RUS	522	

F1B 13 flew

1	S Stefanchuk	UKR	540	+93
2	E Gorban	UKR	540	+92
3	J Sobinovskiy	SVK	540	+74
4	E Pustoselov	RUS	469	
4	S Zubakov	RUS	469	
6	Y Dobrisky	RUS	420	
7	A Krawiec	POL	389	

F1C 3 flew 3 full scores

1	M Gasiorowski	POL	540	+101
2	V Pecheritsa	UKR	540	+94

LOUIS DUPUIS 2 MIN, MONCONTOUR, AUGUST 6-7

F1S results repeated with a correction of David Ginns time:

F1S 11 flew

1	Pl Ceres	FRA	634
2	D Ginns	GBR	617
3	F Neraudeau	FRA	595
4	O Al Saloum	FRA	573
5	JM Fournier	FRA	522

FAI FREE FLIGHT RANKING

Ranking for September 1. Full details at www.freeflightnews.org.uk/ranking/latest.htm

		country	place	pts	recent	
			pts	change	change	results
F1A						
1	M Kosonozhkin	RUS	3306	0	138	EF19=589
2	T Weimer	GER	2910	8	609	EF19=557+6 PR19=537+3
3	P Findahl	SWE	2901	0	11	
4	A Gorsky	RUS	2874	-2	-70	DZ19=0-60
5	M Hrast	SLO	2777	0	165	PR19=518-3 MR19=426-16 SV19=45-56
6	D Fric	CZE	2610	-2	-76	
7	J Danier	CAN	2506	30	766	CN19=505 HC19=338-3 PR19=569+10
8	V Rossler	CZE	2452	9	333	DZ19=503+6 AT19=502 KZ19=0-3 SM19=0-60
9	V Polyayev	RUS	2450	2	178	
10	M Teterin	RUS	2390	-2	0	
11	A V Wallene	NED	2338	49	997	EF19=542+30 HF19=483+10 PT19=417+6 HF19=510-3 DZ19=412-6 SM19=0-83
12	F Adametz	GER	2328	-3	-14	HF19=547+13 EF19=527+23 PT19=307-6 CR19=535+10 SM19=409+3 DZ19=381+3 SV19=0-66 MR19=0-83
13	M Rossen	NED	2322	44	972	
14	B Bagari	SLO	2238	24	527	

F1B

1	M Kovalenko	UKR	3007	0	56	
2	A Andriukov	USA	2941	0	68	MR19=515 HC19=510 CN19=0-23 CR19=0-30
3	A Krawiec	POL	2906	1	91	SM19=525 DZ19=0-40
4	B Silz	GER	2810	3	99	PT19=534
5	O Kulakovsky	UKR	2805	-2	-14	EF19=487-3 AN19=0-33
6	A Bulatov	RUS	2736	-1	-61	
7	V Man	ISR	2710	-1	-35	SV19=0-23 MR19=0-23
8	I Makhmutov	RUS	2603	10	604	KZ19=502 AT19=502
9	A Kulakovsky	UKR	2566	0	235	EF19=513+6 AN19=314-6
10	J Cihak	CZE	2532	-2	107	SM19=474 DZ19=0-56
11	S Stefanchuk	UKR	2404	-1	125	AN19=523+10 VS19=0-33
12	D E Larsen	NOR	2390	-1	138	DZ19=528+6 CR19=441+3 MR19=440+3
13	S Skibicki	POL	2230	1	65	DZ19=352-3 SM19=0-30
14	M Solodov	RUS	2140	-2	-106	

F1C

1	M Gasiorowski	POL	3038	0	167	SM19=503 DZ19=500
2	N Rekhin	RUS	2987	0	129	KZ19=503 AT19=503
3	V Sychov	SLO	2907	0	169	MR19=507 SV19=505 VS19=0-6 AN19=0-10
4	Y Shvedenkov	CAN	2637	4	526	CN19=500 HC19=500
5	Y Gao	CHN	2509	-1	-164	
6	F Ducassou	FRA	2353	8	543	PT19=508 HF19=505 AN19=504+3 VS19=252
7	V Aleksandrov	UKR	2276	4	296	
8	R Summersby	AUS	2213	-3	-240	
9	D Jermol	CRO	2197	-3	-51	MR19=0-6
10	L Savukhina	RUS	2167	-1	141	
11	G Briere	FRA	2129	-1	142	EF19=407-3
12	V Zosimenko	UKR	1901	3	95	VS19=504+6

F1E

1	A Winker	GER	3201	1	261	MT19=558 CH19=539
2	M Popescu	ROU	2665	-1	-414	LM19=0-60 PC19=0-83 CH19=0-136
3	J Orel	CZE	2629	4	968	TZ19=553 LM19=523+6 TC19=425 GC19=400-20 CH19=357-20 PC19=0-66
4	V Zima	CZE	2581	10	1059	MT19=543+33 SG19=532+20 GC19=519+6 LM19=416+10 TZ19=376-13 TC19=0-53
5	G Berto	ITA	2523	-1	250	MT19=590+10 CH19=0-120

6	F Kanczok	POL	2472	7	940	GC19=553+6 TZ19=471-3 SG19=447+10 CH19=412
7	A Trachez	FRA	2471	55	1690	MT19=514+126 TZ19=495+56 UE19=424+53 GC19=376+40
8	J Drapeau	FRA	2463	-5	-46	UE19=0-73
8	F Winker	GER	2463	0	831	CH19=521+13 MT19=413-13
10	C Ziober	POL	2387	50	1586	MT19=485+116 UE19=519+63 TC19=322+30 TZ19=258+20 GC19=222+16
11	J Zurowski	POL	2352	14	1151	CH19=503+36 GC19=471+13 UE19=400+10 MT19=260-6
12	R Sifleet	USA	2274	-7	165	MT19=442-16

ENTRIES FOR WORLD CHAMPIONSHIPS

The entries for the World Champs in Lost Hills are shown below. Compared to the last two events in Europe (2013 and 2017) these numbers are very slightly smaller, but they are significantly larger than Mongolia in 2015. Exactly as you would expect from consideration of the ease and expense of travel, at least for the majority of European countries.

Argentina	3	3	3
Australia	3	3	3
Austria	3	3	3
Belarus	3	0	1
Bosnia-Herzegovina	2	0	0
Bulgaria	3	2	0
Canada	3	3	3
China	3	3	3
Croatia	3	3	1
Czech Republic	3	3	0
Denmark	3	3	0
Finland	3	3	3
France	3	3	3
Germany	3	3	3
Hungary	3	1	0
Israel	3	3	3
Japan	2	3	2
Kazakhstan	1	0	2
Latvia	3	3	0
Lithuania	3	3	3
Mongolia	3	3	3
Netherlands	3	3	0
New Zealand	1	3	0
Norway	2	3	0
Poland	3	3	3
Romania	3	3	0
Russia	3	3	3
Serbia	3	3	3
Slovakia	3	0	0
Slovenia	3	2	0
South Korea	1	2	0
Spain	2	3	2
Sweden	3	3	1
Switzerland	3	3	1
Turkey	3	3	0
Ukraine	3	3	3
United Kingdom	3	3	3
USA	3	3	3
Defending Champions	1	1	
Total individuals	105	98	61
Total countries	39	35	25

FREE FLIGHT FORUM

At a New Venue.

The thirty-fifth BMFA Free-Flight Forum will open at 10 a.m. on Nov. 17th, the day after the AGM, at the Mercure Daventry Court Hotel, Sedgemoor Way, Daventry NN110SG. Among the speakers and topics they'll cover are:

George Seyfang - A Novel Way to Achieve Stability and Control

Ivan Taylor - Scale Matters

Alan Jack - What's Important in a Power Model Climb?

George Seyfang - Gurney Flaps

Bernard Guest - Building a Small Kit Manufacturing Company from the Ground Up

Stuart Darmon - A Glider for Every Occasion

Alan Brocklehurst - How Big Should I Build My Next Coupe?

Ivan Taylor - Gyros in Free Flight Scale.

Lunch will be available and the finish will be around 5 p.m. The cost for the session is just £10, with proceeds going towards the expenses of the teams that represent us at World and European F/F Championships. Pre-booking will ensure that you get a seat, so send your cheque, payable to 'BMFA F/F Team Support', to the BMFA office at 31, St. Andrews Road, Leicester LE2 8RE.

SOUTHERN COUPE LEAGUE

Round 6, Crookham Gala, Salisbury Plain September 1

Peter Hall

There were nine coupe competitors encouraged by the three round requirement which enabled several to fly two events. Chris Redrup won flying a vintage Etienne, he also flew E36 and directed and organised the show. The average performance of the rest was less impressive, but it is encouraging to see coupe flying maintaining its popularity despite the catastrophic decline in competition entries overall. Innovations brilliant or reckless were entirely absent and there was only one auto-coupe but three vintage coupes - two Etienne and an Altair and two using P.G.I. trim.

Salisbury Plain's land and sky-scape looked gorgeous with brilliant sunshine and cumulus cloud streets but the cold northwesterly was stronger than expected, the air was quite turbulent and unpredictable and the long retrieves up and down death valley took their toll on legs long past their 'best before' date. Richard Fryer, who also flew two events came second after dropping a flight in bad air, Peter Hall was third seeing his last flight corkscrewing wildly in turbulence before being dumped. Gavin Manion was unhappy with the trim of his P.G.I. coupe which is usually a very consistent performer. Tony Shepherd flying two events, doesn't usually fly coupe but joined the fun with an Etienne, trimming it as he went along. Alan Brocklehurst and Don Thomson after maxing their first flights retired, Alan with a broken wing and Don after a very long retrieve. Ben Hobbs stalled badly and crashed on launch, breaking his boom, Jim Paton, also multi-eventing flew an Altair and has a list of reasons for his sub-standard performance too long for the space available here.

There are two rounds to go in this year's league, the London Gala on September 29th and finally Coupe Europa on October 19th both on Salisbury Plain which is now easily accessible if the wind direction allows us to fly from the 'trimming field'. If we have five rounds at each event 34 points will be on offer so the league is still wide open.

I must remind you about the competition we set at the beginning of the season. A very small prize is offered and will be presented at Coupe Europa for the most bizarre, funny,

tragic or otherwise interesting flying mistake, please send your entries to me - phall789@btinternet.com and I will submit them to the jury.

		maxes	score
1	C Redrup	3	15
2	R Fryer	2	11
3	P Hall	2	10
4	G Manion	0	7
5	T Shepherd	1	7
6	D Thomson	1	6
7	A Brocklehurst	1	5
8	B Hobbs	0	3
9	J Paton	0	2

League

			C.Gala	Total
1	P Hall	Crookham	10	45
2	G Manion	Birmingham	7	40
3	D Thomson	Croydon	6	29
4	B Hobbs	Oxford	3	23
5	C Redrup	Crookham	15	20
6	A Moorhouse	Vikings		17
7	A Brocklehurst	B&W	5	15
8	P Ball	Grantham		14
9	S Willis	Croydon		12
10	R Fryer	Oxford	11	11
11	W Dennis	MFFG		10
11	J Paton	Crookham	2	10
13	C Foster	Morley		9
14	P Uden	Crookham		8
15	R Vaughn	Crookham		7
15	T Shepherd	Crookham	7	7
17	M Marshall	Impington		6
17	R Elliott	Croydon		6
17	J White	Croydon		6

NFFS SYMPOSIUM REPORT 2019



The 2019 Symposium Report is now available from FFN, see details at the end of this review.

This year's Report has been edited by Rick Pangell, a member of the Magnificent Mountain Men Club in Colorado and, amongst other classes, he flies F1E. You know the effect of an F1E-flying editor (see FFN) and there are indeed 4 articles on the class.

In the OPERATION section the first article is "Spiral Vs. Vertical Climbs - Which is better?" by Harry Grogan. Harry compares the flight performance of E36 trimmed to fly a spiral or straight climb. He predicts the climb height for a range of spiral configurations and the overall flight time improves as the diameter of the spiral is reduced and the number of spiral turns is reduced. A straight climb is more efficient than a spiral but not by very much. I did a double take on the remarkably low quoted glide speed of 0.55 m/s from measured data and then realised it was the glide sink rate.

"Thermals and Picking Lift - An Update" by Paul Rossiter is a follow-up to his article in the 2016 Symposium Report. This time he addresses the conditions in a mid-morning round brought on by a large number of dropped flights in that round at Australian World Cup events. He deduces that this is related

to thermals being limited by the inversion layer and spreading out and sinking when it cannot break through the layer.

“Trimming a Model’s Climb with an altimeter” is Alex Andruikov’s guide to how to acquire data from an altimeter to help understand the performance of the model, but without describing any trimming that you might do to improve this performance.

In “Use and abuse of GPS Trackers” Chris Edge provides a detailed review of the available systems and their use in retrieving models.

“Flying F1E” by Bob Sifleet gives a full description of the magnet steering system, parameters of models for different flight systems. Note that the numbers given as wing loading gram/dm² in figure 9 are actually the inverse of loading in dm²/gram. Bob describes the typical contest procedures and launch methods for different conditions, surprisingly doing nothing to gain height when in windy conditions.

Moving now to the DESIGN section, Brian Eggleston describes “Performance Testing of F1C Propellers” using the wind tunnel in the basement of a retired professor. Two props from Babenko and one from Sychov are compared at airspeeds up to 18.9 m/sec with plans to extend the capability of the tunnel to give higher speeds.

“A New F1Q Design with Geared Motor and F1B Propeller” by Sergei Vorviihost describes his current F1Q and notes the reduced power needed in flight compared to static ground tests (effectively the same consideration as that being address by Bran Eggleston in the previous article).

In “Optimization of Global Factors In Indoor Model Design” David Aronstein quotes the formula for predicting flight time from comparing work by the rubber against the product of drag and distance flow. The formula is simplified by assuming constant flight speed and he notes that the optimum rubber weight is predicted to be double the airframe weight (and decreasing the airframe weight increases duration). He reviews previous analyses and makes suggestions of how to improve duration of some model classes.

“The Development of Electronic Steering for F1E Model Aircraft” is Tom Ioerger’s account of his stages in developing an electronic steering system to replace the traditional magnet steering system, quoting good initial results from the latest version but with only a bare verbal description of the system

Moving now to FABRICATION, John Lorbiecki describes “Building And Using Laser Technology” describes laser cutting systems and their use for cutting balsa parts.

An alternative modern approach to construction is “3D Printing - A Path To Custom Parts That Anyone Can Walk” by Paul Bradley. He discussed the available systems and what to look for, how to develop a 3D model of the required part and hints for good results.

The PROPAGATION OF THE FAITH section starts with “Free Flight from a Youth Perspective” by a joint authorship of Bob Stalick as a free flight veteran and Adelaide Machado Ulm for the youth perspective. They conducted a survey of people who had been members of the US Junior teams and other active juniors. Almost all had started flying at a young age and retained an affinity to free flight even if not currently active. The obvious importance of mentorship was noted as was the difficulty of travelling to events.

In “F1E History and Development” George Arghir describes how F1E developed in Romania.

“Remembering Bill Gieskieng - One person's affair with a hobby” is Rick Pangell’s assembly of memories and interviews with Bill, emphasising the various innovations that he made.

John Mcgrath and Jerry Murphy discuss small rubber class in “P-18 A “New” Beginners Event”. This was developed by Jerry as a STEM class for kids.

“Finals: Thermals, Performance and Grace” by Aram Schlosberg examines alternative team selection methods.

In “F1E History and Evolution in numbers” Daniel Petcu presents statistics of the growing number of events and participation in F1E.

The 2019 Models of the Year are presented with details and photos of:

Flying Scale Martin MB-1 Mail plane by Vince Gilbert

Raptor F1C by Artem Babenko

Orca F1B by Stepan Stephanchuk

F1R Category I, II, III and IV Indoor national record holder, by Nicholas Ray

Flying Scale Waco YKS-6 Peanut Scale by Enrique Maltz

2019 Hall of Fame inductees are John Lorbiecki (NFFS President), the Grell family, and posthumously Paul Lagan.

The report closes with the Presidential Message (the last one from John Lorbiecki), the list of patrons of the Report and the CVs of the contributors to the report.

Buying the Report from FFN

The 2019 Symposium Report is available from FFN for £37.30 including postage within UK, £41.30 with postage to the rest of Europe, or £45.50 with postage to any other countries. Orders and Paypal payments may be made at <http://www.freeflightnews.org.uk/ffnbuy.htm> Note that for countries outside Europe it is likely to be cheaper for you to purchase the report direct from NFFS.

ROYAL AERO CLUB TRUST BURSARIES

Each year the Royal Aero Club Trust awards aeromodelling bursaries of up to £500 each to enable flyers upgrade equipment or to gain further qualifications. Applicants for these grants must hold British Citizenship and be permanently resident in UK and aged 14-21 years (advanced - bursaries 24 year) Applications for 2020 bursaries are now available for downloading here:

https://drive.google.com/file/d/1bEnMeMHqJZXnu9i1nJd6iHyQ25hHSF_S/view

Closing dates for applications will be 31 March 2020. So far all applications have been from RC or drone flyers; are there, in fact, any British free flight flyers under 24 now?

NOTICEBOARD

WANTED: WHITE FIBAFILM AND SEELIG F1J TIMER

Neil Allen is looking for a complete roll of white fibafilm to buy or swap for complete roll of red, yellow or orange. Also looking for Mini Seelig F1J timer, waggler type only (not air vane). Contact Neil at neil.allen83@gmail.com