

Free Flight news



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DIARY

December 16 (Tuesday)	Chobham Tree Chop. See FFn 0309.	February 13-16 Lost Hills, California, USA	Maxmen International. World Cup event F1A, F1B, F1C. Maxmen Club. Contact: G Batiuk, 1759 Southwood Dr, San Luis Obispo, CA 93401, USA, +1 805 545 0700
December 21 Church Fenton	4 events: 1) Combined Tailless R/P, EOP, Vint R/G, Vint P (15 sec), Classic P (12 sec), FIJ (7 sec), OG, SLOP; 2) Comb E30, Classic G, Mini Vint R/P, Brit Power; 3) Comb OR/P; 4) Comb C02, CDH, P30, A1, 1/2A (7 sec). CD and contact: J Godden 0113 2521002.	February 15 Sculthorpe	BMFA Winter Open. O/P (Frog Senior), O/R, O/G, SLOP, EOP, Vintage. Contact: M Woodhouse 01603 457754 CD M Marshall
December 28 Church Fenton	5 events. 1) Combined SLOP, O/P (7 sec), OE (30 sec); 2) OG; 3) Open Vintage; 4) Comb P30+CDH; 5) Comb E30+C02. CD and contact D. Davitt 0113 2675433	February 28 Viabon, France	Criterium Phillipe Lepage. World Cup event F1B. Paris Air Modele. Contact: P Templier, 3, rue des Brisaciers, 77090 Collegien, France, tel: +33 160 359358. E: pierre-olivier.templier@laposte.net. Web: http://www.paris-air-modele.com
January 4 Church Fenton	3 events. 1) Combined Glider Vint, Classic, modern – various line lengths; 2) Combined Power (Timperley rules) includes OE; 3) Combined P30+CDH. CD and contact A. Kelly 0113 2539944	February 17 (Tuesday)	Chobham Tree Chop. See FFn 0309.
February 8 Middle Wallop	Crookham Gala Mini Vintage (BMFA rules); Comb SLOP + Open Elec (BMFA rules): SLOP (glow) 10 sec, SLOP (Diesel) 12 sec, Open Elec 30 sec; Comb glider: Modern Gliders (BMFA rules 50m line), Classic Gliders (SAM rules, before 31 Dec 1960, 75m line): Vintage Gliders (SAM rules, before 31 Dec 1950, 100m line). Start 10.00. 3 flights, max to be decided on the day. In all classes flyoff models must be the same classification as that used in the contest. Contact: J Thompson 01252 842471, JohnD.Thompson@btinternet.com	March 6 Pori, Finland	Bear Cup. World Cup event F1A, F1B, F1C. Entry fees: €25. Contact: Y Lindgren, Muonamiehentie 5, 28610 Pori, Finland, tel: +358 50 336 159, fax: +358 2 63 24 988. mail: pipo.lindgren@dnainternet.net
February 10 (Tuesday)	Chobham Tree Chop. See FFn 0309.	March 7 Crivelle, TO, Italy	5th Coppa Guibo FeaTrofeo AGO. F1K. Contact: S. Schirru, via C B di Cavour a.S., 10095 Grugliasco, Italy, tel: +39 011 780 17 88, fax: +39 011 988 20 67
		March 7 Area Venues	BMFA 1st Area. O/R, (Gamage), F1C (Halfax/Plugge), FIH, Mini-Vintg(Plugge)
		March 20-21 Gjovik, Norway	Holiday on Ice. World Cup event F1A, F1B, F1C. Contact: T Bortne, Jernbanev. 28,2840 Reinstoll, Norway, tel: +47 611 97463 or +47 611 96 736, fax: +47 611 98351 or +47 611 52606

FFn

A reminder that there was a subscription renewal form in FFn last month. Please send in your renewal promptly to ensure the January issue reaches you. There is still no news of the NFFS Symposium Report for 2003, so these will probably not be available until late January. In the absence of news that NFFS has sent them, I do not have a confirmed price for the reports. However, I estimate that it will be close to last year's price of £21 including postage in UK and Europe (plus £3.50 for airmail delivery outside Europe). If you would like to place an advance order for a copy while paying your FFn subscription, then you may pay this amount. If there is any modification in price I will contact you.

CIAM BUREAU MEETING

Report by Ian Kaynes.

The CIAM Bureau meeting was held in Lausanne, Switzerland, on November 28 and 29. As usual, the main items of note for free flight were the contest calendar for next year and details of championships. The proposals for the March 2004 Plenary meeting were reviewed and are summarised below.

Proposals

Events proposed for the agenda of the March 2004 CIAM Plenary meeting included the following FF items.

F1K (CO2) models. Hungary and Italy propose to change the minimum weight of the models from 75 to 85g and reduce the maximum tank size from 2 to 1.5cc. The proposal also changes the flyoff process to have increase the max in one minute steps from two minutes, in place of the current ground running before launching for a constant two minute max

F1L (EZB) models. Hungary proposes to rationalise the definition to maximum projected wing span of 458mm and maximum chord 76mm, without confusion by quoting equivalent dimensions in inches with small differences.

Free Flight Electric model specification proposal is understood to have been submitted by USA. It is believed that this will be included on the agenda and it will be described in a later FFn.

Timekeepers. Serbia-Montenegro propose to change the current foreign timekeeper rule in para B.11.1 to force each team to provide a timekeeper, either bringing one of their own nationals or paying the travel costs for a timekeeper provided by the organisers from a neighbouring country. "The rule shall not be applied to individual participants from any country."

Free Flight Technical meeting

In view of the small number of proposals it was decided not to hold a Free Flight Technical Meeting at the March 2004 Bureau.

Rule change cycle

Under the rule change cycle, the March 2004 Plenary meeting is the last opportunity to change rules for the indoor championships class F1D (changes which would come into effect in 2005, giving a year in advance of the 2006 World Champs). The lack of any F1D proposals means that the current rules will remain as they are for the next four years.

For the classes F1A/B/C/E which have their World Champs in years with odd dates, the March 2005 Plenary meeting will be the opportunity to change rules for the following four years. There will undoubtedly be plenty of work for a Technical Meeting in 2005!

Championships News

Junior World Championships F1A, F1B, F1J/P will be in France at Moncontour. The schedule is:

<i>Saturday</i>	Aug 7	Possible early arrival and training day
<i>Sunday</i>	Aug 8	Official arrival, opening ceremony, team managers meeting
<i>Monday</i>	Aug 9	Registration, training
<i>Tuesday</i>	Aug 10	F1A contest
<i>Wednesday</i>	Aug 11	F1B contest
<i>Thursday</i>	Aug 12	F1J/P contest
<i>Friday</i>	Aug 13	Reserve day or sightseeing tour, prize giving and closing ceremony, banquet
<i>Saturday</i>	Aug 14	Departure

Like the 2003 Junior European Championships, the power class at this event will be a combination of F1J and F1P. Each team may enter a maximum of four competitors, providing at least one team member flies only F1P models (otherwise 3 team members). The power class will be flown in 7 rounds to a maximum time of 3 minutes. Motor run will be 7 sec for F1J and 10 sec for F1P.

The entry fees are CHF 385/ €250 for competitors, team managers, and team managers assistant. This is reduced to €225 if paid before March 15. There is no fee for supporters. Accommodation possibilities include holiday lodge, gites, hotels, and, of course, the camp site at Moncontour.

World Indoor Championships for seniors and juniors will be held in the salt mine at Slanic Prahova in Romania. The schedule of the event is:

<i>Monday</i>	Oct 4	Arrival, registration
<i>Tuesday</i>	Oct 5	Training, opening ceremony, team managers meeting
<i>Wednesday</i>	Oct 6	Rounds 1 and 2
<i>Thursday</i>	Oct 7	Rounds 3 and 4
<i>Friday</i>	Oct 8	Rounds 5 and 6, prizegiving, banquet
<i>Saturday</i>	Oct 9	departure

Entry fees will be €300 for seniors, team managers, team managers assistants, €250 for juniors, €60 for helpers and supporters, banquet €30 for adults, €25 for children under 14. Full board and lodging will cost €45 per day.

European Championships F1A F1B F1C. This event will be held at Buzau in Romania, which you may remember as the venue for the Euro Champs in 2000. The schedule is:

<i>Sunday</i>	July 25	Arrival, registration, unofficial practice
<i>Monday</i>	July 26	Official practice, model processing, opening ceremony, team managers meeting
<i>Tuesday</i>	July 27	F1A contest
<i>Wednesday</i>	July 28	F1B contest
<i>Thursday</i>	July 29	F1C contest
<i>Friday</i>	July 30	Reserve day, sightseeing tour, World Cup registration, prize giving, closing ceremony
<i>Saturday</i>	July 31	Departure, optional World Cup contest and prizegiving F1A
<i>Sunday</i>	Aug 1	Optional World Cup F1B/C contest and prizegiving
<i>Monday</i>	Aug 2	Departure

Entry fees are €260 for competitors and team managers, €50 for supporters. Full board and lodging cost per person per day is €40 in a hotel in Buzau, the banquet is €30. World Cup entry is €30 for seniors and €20 for juniors.

European Senior and Junior Championships F1E will be held in Czech Republic. The offer was made and accepted at the Bureau meeting. The schedule is:

<i>Wednesday</i>	Sept 8	Arrival and registration
<i>Thursday</i>	Sept 9	World Cup contest
<i>Friday</i>	Sept 10	Model checking, training, opening ceremony, technical meeting
<i>Saturday</i>	Sept 11	Championships flights
<i>Sunday</i>	Sept 12	reserve day, prize-giving, banquet
<i>Monday</i>	Sept 13	departure

The location is Rana, 9km north of Louny. Entry fees are €225 for senior competitors, team managers and their assistants, €150 for junior competitors, €45 for supporters and helpers. The banquet will cost €30 (€25 for juniors). Accommodation will be in local hotels.

2004 WORLD CUP EVENTS SUMMARY

The following is a quick-reference list of the 2004 World Cup events extracted from the full FAI Calendar. For details of the events see the full calendar listing. Note that the country abbreviation shown here applies to the flying site location, where the organising country is different this is included in the contest title.

World Cup F1A F1B F1C

Feb 13-16	Lost Hills	USA	Maxmen International
Feb 28	Viabon	FRA	Criterium Phillipe Lepage
Mar 6	Pori	FIN	Bear Cup
Mar 20-21	Gjovik	NOR	Holiday on Ice
Mar 27	Matfors	SWE	Matfors VT International
Apl 10-11	Naranderra	AUS	Australian FF Champs
Apr 13-14	Naranderra	AUS	Southern Cross Cup
Apr 19-21	Omarama	NZL	Kotuku Cup
Apr 22-25	Omarama	NZL	Omara Cup
Apr 24	Lucenec	SVK	City cup of Lucenec
Apr 24-25	Osijek	CRO	Kup Slavonije I Baranje
Apr 30	Madziunai	LTU	Baltic Cup
May 1	Madziunai	LTU	Estonian Free Flight Cup
May 15-16	Vojka	SCG	21st Srem Cup
May 21-23	Vsechov	CZE	19th Jihocesky Pohar
May 29-30	Tass	HUN	20th Pusztu cup
Jun 5-6	Tass	HUN	Novohrad Cup of Slovakia
Jun 5-6	Beja	POR	Taça Von Hafe
Jun 19	Zrenjani	SCG	37th Memorijal Dj. Zigic
Jun 26-27	Gliwice	POL	Open International
Jun 26-27	Kazan	RUS	Kazan cup
Jul 2-4	Kharkiv	UKR	Kharkiv Cup
Jul 2-4	Rinkaby	SWE	Scania cup
Jul 5	Rinkaby	SWE	Nordic Cup of Denmark
Jul 9-11	Kyiv	UKR	Antonov Cup
Jul 10	Tass	HUN	Vörös Jeno Memorial Contest
Jul 16-18	Odesa	UKR	Odesa Black Sea Cup/Moldova
Jul 17-18	Borden	CAN	Huron Cup
Aug 1-2	Buzau	ROM	Buzau Cup
Aug 5-7	Noizé	FRA	Poitou
Aug 6-8	Stalowa Wola	POL	Summer Cup
Aug 14	Bosanski	BIH	Memorijal Izet Kurtalic
Aug 20-22	Stassfurt	GER	Salzland cup
Aug 27-28	Beer Sheva	ISR	53rd Israel FF Champs
Aug 28	Bosanski	BIH	Una Cup
Sep 2-5	Zülpich	GER	35th Eifel Pokal
Sep 4	Sisak	CRO	Siscia Cup
Sep 16-18	Orel	RUS	Cup of Aviaprom
Sep 18-19	Fakenham	GBR	Stonehenge Cup
Oct 15-17	Sacramento	USA	Sierra Cup
Oct 16-17	Zagreb	CRO	Memorijal Vilima Kmocha
Nov 8-10	Novo Mesto	SLO	Krka Cup

World Cup F1E

May 7-9	Sisemol	ITA	24th Coppa Sisemol
May 15 *	Liptovsky	SVK	Liptov Cup
May 16 *	Liptovsky	SVK	Mayor Cup Liptovska Mikulas
Jun 17-18	Turda	ROM	Napoca cup
Jun 18-19	Turda	ROM	Turda cup
Sep 4	Liptovsky	SVK	5th Mikulas cup of Hungary
Sep 5	Liptovsky	SVK	1st Cavalloni cup of Hungary
Sep 9	Rana	CZE	Open International
Sep 24	Lubomia	POL	Open International Contest
Sep 25	Račibórz	POL	Open International Contest
Oct 8-9	Oberkotzau	GER	Oberkotzau
Oct 9-10	Oberkotzau	GER	Föhrberg Cup

* These events are shown on the nominated alternate dates, to be finally confirmed by the organisers.

FAI COMPETITION CALENDAR 2004

February 13-16 Maxmen International. World Cup event
Lost Hills, F1A, F1B, F1C. Entry fees: US\$20.
California, USA Maxmen Club. Contact: G Batiuk, 1759
Southwood Dr, San Luis Obispo, CA
93401, USA, tel: +1 805 545 0700

February 28 Criterium Phillipe Lepage. World Cup
Viabon, France event F1B. Entry fees: €30. Paris Air
Modele. Contact: P Templier, 3, rue des
Brisaciers, 77090 Collegien, France, tel:
+33 160 359358. E: pierre-
olivier.templier@laposte.net. Web:
http://www.paris-air-modele.com

March 6 Bear Cup. World Cup event F1A, F1B,
Pori, Finland F1C. Entry fees: €25. Contact: Y Lindgren,
Muonamiehensie 5, 28610 Pori, Finland,
tel: +358 50 336 159, fax: +358 2 63 24
988. mail: pipo.lindgren@dnainternet.net

March 7 5th Coppa Guibo FeaTrofeo AGO. F1K.
Crivelle, TO, Italy Entry fee €20. Contact: S. Schirru, via C B
di Cavour a.S, 10095 Grugliasco, Italy, tel:
+39 011 780 17 88, fax: +39 011 988 20 67

March 20-21 Holiday on Ice. World Cup event F1A,
Gjovik, Norway F1B, F1C. Entry fee NOK 250. Contact: T
Bortne, Jernbanev. 28, 2840 Reinstoll,
Norway, tel: +47 611 97463 or +47 611 96
736, fax: +47 611 98351 or +47 611 52606

March 27 Matfors VT International. World Cup
Matfors, Sweden event F1A, F1B, F1C. Entry fee SEK 250.
Contact: M Holmbom, Österlo 140, 86013
Stöde, Sweden, tel: +46 70 399 18 13, fax:
+46 6021210, email: mikke@ebox.tninet.se

April 10-11 Australian Free Flight Championships.
Naranderra, World Cup event F1A, F1B, F1C. Entry
NSW, Australia fees: AU\$ 20. Australian Free Flight
Society. Contact: P Mitchell, PO Box 44,
Terrigal NSW 2260, Australia, tel: +61 2
438 43217, fax: +61 2 436 78316, email:
filnoels@bigpond.net.au

April 13-14 Southern Cross Cup. World Cup event
Naranderra, F1A, F1B, F1C. Entry fees: AU\$ 10.
NSW, Australia Contact: T Stowe, PO Box 138, Winmalee
NSW 2777, Australia, tel: +61 2 475
41334, fax: +61 2 475 41334,
email: stowes@ozemail.com.au

April 19-21 Omarama, New Zealand	Kotuku Cup. World Cup event F1A, F1B, F1C. Entry fees: NZ\$20 per class. Contact: R Wallace, 956 Riverslen Rd South, Hastings, New Zealand tel: +64 6 878 49 93, fax: +64 6 878 49 93	May 29-30 Tass, Hungary	20th Puszta Cup. World Cup event F1A, F1B, F1C. Entry fees: CHF 40. Cavalloni Modelling Club. Contact: Pinkert György, Pf. 16, 1625 Hungary, Hungary, tel: +36 1 221 40 71, fax: +36 1 221 4071, email: info@cavalloni.hu
April 22-25 Omarama, New Zealand	Omara Cup. World Cup event F1A, F1B, F1C. Entry fees: NZ\$ 20 per class. Contact: C Murphy, 5-126 Bishop St, St Albans, Christchurch, New Zealand, tel: +64 3 374 33 84., fax: +64 3 374 33 94	May 29-30 Stadium de Bordeaux Lac, France	5th Concours International de Bordeaux F1D, F1M, F1L. Contact: Jean-Pierre Darrouzes, 32, av. du Maréchal de Lattre de Tassigny, 33610 Cestas, France, tel: +33 5 56 07 65 66, fax: +33 5 56 36 95 44
April 24 Lucenec-Bol'kovce, Slovak Republic	City Cup of Lucenec. World Cup event F1A, F1B, F1C. Entry fees: €30. Contact: S Hubert, Malinovskeho 5, 98403 Lucenec, Slovak Republic, tel: +421 47 433 02 13, email: butorova@stonline.sk	June 5-6 Tass, Hungary	Novohrad Cup of Slovakia. World Cup event F1A, F1B, F1C. Entry fees: €30. Contact: Stefan Hubert, Malinovskeho 5, 98403 Lucenec, Slovak Republic, tel: +421 47 433 02 13, email: butorova@stonline.sk
April 24-25 Osijek, Croatia	Kup Slavonije I Baranje. World Cup event F1A, F1B, F1C. Entry fees: €25. Aero Club Osijek. Contact: D Sokolic, Sjenjak 101, 31000 Osijek, Croatia, tel: +385 31 571 700, fax: +385 31 508262, e: danko.sokolic@inet.hr	June 5-6 Beja, Portugal	Taça Von Hafe. World Cup event F1A, F1B, F1C. Entry fees: €35. Contact: Anibal Paiva, Praça Carlos Alberto 63-3, 4000 Porto, Portugal, tel: +351 2233 93740, fax: +351 2233 93749
April 30 Madziunai, Lithuania	Baltic Cup. World Cup event F1A, F1B, F1C. Entry fees: Seniors: €25, juniors €10. Aeromodelling Club of Utena. Contact: Rolandas Mackus, Taikos 19-12, 4910 Utena, Lithuania, tel: +370 687 26 002. ax: +370 389 69 181, email: rolandasmackus@vytrolma.lt. web: http://www.aeromodeling.lt	June 12-13 Orleans, France	Concours International d'Orleans. F1D, F1L, F1M. Entry fee €15. Contact: Jacques Delcroix, 41 allée du Coudray, 45160 Olivet, France, tel: +33 2 38 63 49 57, fax: +33 2 38 63 49 57
May 1 Madziunai, Lithuania	Estonian Free Flight Cup. World Cup event F1A, F1B, F1C. Entry fees: €25. Fun Fly Club. Contact: Aavo Koppel, Pärnu MNT 10, Tallinn 10148, Estonia, tel: +372 50 48 886, fax: +372 64 05 70 01	June 17-18 Turda, Romania	Napoca Cup World Cup event F1E. Entry fees: €25. Contact: M Zanciu, Federatia Romana de Modelism, OP 6 - CP 56, Bucuresti, Romania, tel: +4021 33 04 040 ext. 224, fax: +4021 33 04 040 ext. 224, email: frm@radiotel.ro
May 7-9 Sisemol, Italy	24th Coppa Sisemol. World Cup event F1E. €30. Contact: Antonio Ghiotto, Via Adenaner 56, 36100 Vicenza (VI), Italy, tel: +39 0444 570289	June 18-19 Turda, Romania	Turda Cup World Cup event F1E. Entry fees €25. Contact: M Zanciu, see Napoca Cup (17 June)
May 15 Liptovsky Mikulas, Slovak Republic	Liptov Cup. World Cup event F1E. Entry fees: €30. Contact: P Nosko, Nábrezie 1686/10, 031 01 Liptovska Mikulas, Slovak Republic, tel: +421 903 613283, fax: +421 44 55 202 64, email: nosko@naex.sk	June 19 Aradac - Zrenjanin, Serbia and Montenegro	37th Memorijal DJ. Zigic. World Cup event F1A, F1B, F1C. Entry fees: €30. Contact: Nikola Borovac, Aeroklub F. Kluz Zemun, Cara Dusana 57, 11080 Zemun, Serbia and Montenegro, tel: +381 11 619 164, fax: +381 11 625 371, email: dlakic@ptt.yu
May 16 Liptovsky Mikulas, Slovak Republic	Mayor Cup Liptovska Mikulas. World Cup event F1E. Entry fees: €30. Contact: P Nosko. Nábrezie 1686/10, 031 01 Liptovska Mikulas, Slovak Republic, tel: +421 903 613 283, fax: +421 44 55 202 64	June 26-27 Gliwice, Poland	World Cup event F1A. Entry fee senior €30, junior €15. Aero Club of Gliwice. Contact: Stanislaw Kubit, Ul Rybnicka 84, 44-100 Gliwice, Poland, tel: +48 32 232 18 22, email: qbit@digip.l
May 15-16 Vojka, Serbia and Montenegro	21st Srem Cup. World Cup event F1A, F1B, F1C. Entry fees: €30. Aeroklub Nova Pazova. Contact: Jovanovic Dragomir, Jovana S. Popovica 11, 22330 Nova Pazova, Serbia and Montenegro, tel: +381 22 333 188, fax: +381 11 625 371, email: rimog@ptt.yu	June 26-27 Kazan, Russia	Kazan Cup. World Cup event F1A, F1B, F1C. Entry fee US\$20. Contact: Andrey Burdov, Iskra st. 8-61, Kazan 420045, Russia, tel: +7 8432 99 00 26 or +7 917 39 12 699, fax: +7 8432 99 00 26, email: burdov@mi.ru
May 21-23 Vsechov, Czech Republic	19th Jihocesky Pohar. World Cup event F1A, F1B, F1C. Entry fees: €35. Contact: Rostislav Kvasnicka, Svpomoc 694, 39102 Sezimono Ústi, Czech Republic, tel: +420 608 059803, fax: +420 381 27 65 79	July 2-4 Kharkiv, Ukraine	Kharkiv Cup. World Cup event F1A, F1B, F1C, F1G, F1H, F1J. Entry fee US\$ 20. Contact: Victor Vishnyakov, Str Saperna 30, ap 125, Kharkiv 61033, Ukraine, tel: +380 57 712 07 11 or 707 10 11, fax: +380 57 712 0711, e: kretov@rocket.kharkov.ua

July 2-4 Rinkaby, Sweden	Scania Cup. World Cup event F1A, F1B, F1C. Entry fees: SEK 250. Aeroclub of Malmö. Contact: Lennart Hansson, Sigurdsgatan 15, 21566 Malmö, Sweden, tel: +46 40 193 790, fax: +46 11 368 214	August 6-8 Stalowa Wola, Poland	Summer Cup. World Cup event F1A, F1B, F1C. Entry fee €25. Stalowa Wola Aero Club. Contact: Robert Radwanski, Ul. Dmowskiego 7 m 19, 37-450 Stalowa Wola, Poland, tel: +48 15 844 45 15 or +48 15 877 65 51, fax: +48 15 844 01 18, email: rradwan@wp.pl
July 5 Rinkaby, Sweden	Nordic Cup of Denmark. World Cup event F1A, F1B, F1C. Entry fees: SEK 250.00. FF Society Denmark. Contact: B Nyhegn, Birkevegez 2, Gadevang, DK 3400 Hillerod, Denmark, tel: +45 482 67 306, fax: +45 48 24 1069	August 8-14 Moncontour, France	Junior World Championships F1A, F1B, F1J/P.
July 9-11 Kyiv, Ukraine	Antonov Cup. World Cup event F1A, F1B, F1C, F1G, F1H, F1J. Entry fees: US\$20. Contact: Ukrainian Aeromodelling Club, Str. Industrialna 27, n/c 8, kyiv 03056, Ukraine, tel: +380 44 457 09 73, fax: +380 44 457 09 73, e: zakharov@cstcam.kiev.ua	August 14 Bosanski Petrovac, Bosnia and Herzegovina	Memorijal Izet Kurtalic. World Cup event F1A, F1B, F1C. Entry fees: €15. Contact: Kenan Mandra, Aleja Sehida Resula br. 5, 71300 Visoko, Bosnia and Herzegovina, tel: +387 33 22843 mob: +387 61611 566, fax: +387 33 22 843, email: sak@bosnia.ba web: http://www.memo-izetkurtalic.co.ba
July 10 Tass, Hungary	Vörös Jenő Memorial Contest. World Cup event F1A, F1B, F1C. Entry fees: €25. Modelling Club Szeged. Contact: Vörös Jenő, Tarogató út 63, 6726 Szeged, Hungary, email: vorosjeno@eastcom.hu	August 20-22 Stassfurt, Germany	Salzland Cup. World Cup event F1A, F1B, F1C. Fees: senior: €30, junior €15. Contact: G Wöbbeking, Holstenstr 108, 22767 Hamburg, Germany, tel: +49 40 38 98 310, fax: +49 40 38 98 309, e: woebbeking@t-online.de
July 16-18 Odessa, Ukraine	Odessa Black Sea Cup / Moldova. World Cup event F1A, F1B, F1C, F1G, F1H, F1J. Entry fees: €20. Farlep Club. Contact: Oleg Stoev, Str. Marazliyevska 34-a, Odessa 65014, Ukraine, tel: +380 482 210545 mob: +380 67 73 26 722, fax: +380 482 429090, email: odessa_cup@farlep.net. Web: http://www.farlep.net/odessa_cup	August 27-28 Beer Sheva District, Israel	53rd Israel Free Flight Championship. World Cup event F1A, F1B, F1C, F1G, F1H, F1J. Entry fees: US\$ 35. Contact: Miss Ofri Sagi, POB 26261, Tel Aviv 61263, Israel, tel: +972 3 517 50 38, fax: +972 3 5177 280, e: office@aeroclub.org.il
July 17-18 Borden, Canada	Huron Cup. World Cup event F1A, F1B, F1C. Entry \$CAN 30, late entry \$CAN 40. Contact: Jerry McGlashan, RR1 372 6th Conc Rd, Clear Creek, ON N0E 1C0, Canada, tel: +1 519 875 2734, Email: rgmcmcg@sympatico.ca	August 28 Bosanski Petrovac, Bosnia and Herzegovina	Una Cup. World Cup event F1A, F1B, F1C. Entry fees: €10. Aero Club Bihac. Contact: Haris Hadzihajdarevic, Skendera Kulenovica 21, Bihac, Bosnia and Herzegovina, tel: +387 33 220843 or +987 61 790 183, fax: +387 37233652, email: hari_h@bih.net.ba web: http://www.bihac-leewave.netfirms.com
July 25 - Aug 1 Buzau, Romania	European Championships F1A, F1B, F1C	September 2-5 Zülpich, Germany	35th Internationaler Eifel Pokal. World Cup event F1A, F1B, F1C. Fee: €30. Contact: P Mönninghoff, Friedrich Ebert Str. 41, 58332 Schwelm, Germany, tel: +49 2336 72 48, email: moenninghoff-peter@t-online.de
July 30 - Aug 1 Beauvoir-sur-Niort, France	Azay Le Brulé Inter. F1A, F1B, F1C, F1G, F1H, F1J, F1K. Entry fee €13 for the 3 days. Contact: André Trachez, 20 rue du Grand Port, 79000 Niort, France, tel: +33 6 0857 3550, e: andre.trachez@laposte.net	September 4 Liptovsky Mikulas, Slovak Republic	5th Mikulas cup of Hungary World Cup event F1E. Entry fees: CHF 30. Cavalloni Modelling Club, Contact: Pinkert György, Pf. 16, 1625 Hungary, tel: +36 1 221 40 71, fax: +36 1 221 4071, email: info@cavalloni.hu
August 1-2 Buzau, Romania	Buzau Cup. World Cup event F1A, F1B, F1C. Entry fees: €30. Contact: M Zanciu, Federatia Romana de Modelism, OP 6 - CP 56, Bucuresti, Romania, tel: +4021 33 04 040 ext. 224, fax: +4021 33 04 040 ext. 224, email: frm@radiotel.ro	September 4 Sisak, Croatia	Siscia Cup. World Cup event F1A, F1B, F1C. Entry fees: €25. Contact: Zoran Zechner, Hrvatskog narodnog preporoda 19, 44010 Sisak, Croatia, tel: +385 44 53 11 65, fax: +385 44 53 00 74, email: sisacki-vodovod@sk.htnet.hr
August 5-7 Noizé, Thouars, France	Poitou. World Cup event F1A, F1B, F1C, F1G, F1H, F1J, F1K. Entry fees: Junior: €12, senior: 1 class €30 / 3-4 classes ?? Contact: A Roux, Poitou 2004, BP 36, 79101 Thouars Cedex, France, t: +33 5 4966 6107, fax: +33 5 4996 1337, e: contact@poitouaero.com, web: http://www.poitouaero.com	September 4-5 Alicante, Spain	6th Copa Tabarca. F1D, F1L, F1M, F4D (indoor scale), F4F (peanut scale). Entry fee €20. Contact: D. Juan Manuel caro Ferrández, C/ San Benito no 2-3 D, 03013 Alicante, Spain, tel: +34 61 99 87 379 or +34 965 44 88 24, email: clubsaf15@hotmail.com

September 5
Liptovsky
Mikulas, Slovak
Republic
1st Cavalloni Cup of Hungary World Cup event F1E. Entry fees: CHF 30. Cavalloni Modelling Club. Contact: Pinkert György, Pf. 16, 1625 Hungary, tel: +36 1 221 4071, fax: +36 1221 4071, e: info@cavalloni.hu

September 9
Rana near Louny,
Czech Republic
Open International. World Cup event F1E. Contact: Ivo Kornatovsky, Pod Nadrazim 128, 33101 Plasy, Czech Republic, email: adpro@iol.cz

September 10-13
Rana nr Louny,
Czech Republic
European Championships F1E senior and junior

September 16-18
Orel, Russia
Cup of Aviaprom. World Cup event F1A, F1B, F1C. Entry fee US\$ 25. Contact: Nadezda Smegovay. 88-8 Volokolamskoe sh., 125362 Moscow, Russia, tel: +7 095 491 97 47, fax: +7 095 491 97 47, email: fas@cnt.ru

September 18-19
Fakenham -
Norfolk, UK
Stonehenge Cup. World Cup event F1A, F1B, F1C. Entry fees: £23. BMFA. Contact: M Woodhouse, 12 Marston Lawe, Eaton, Norwich, Norfolk NR4 GL2, UK, tel/fax: +44 1603 45 77 54

September 24
Lubomia, Poland
Open International World Cup Contest. World Cup event F1E. Entry fees: Senior: €30, junior: €15. Aero Club of Rybnik. Contact: Wieslaw Dziuba, Ul. Zorska 12 m 2, 44-203 Rybnik, Poland, tel: +48 32 42 230 81, email: dziuba@poczta.onet.pl

September 25
Račibórz, Poland
Open International World Cup Contest. World Cup event F1E. Entry fees: Senior €30, junior €15. Aero Club of Gliwice. Contact: Marek Lysowski, Ul. Sienkiewicza 8/10, 47-400 Raciborz, Poland, tel: +48 32 41 92 741, email: mlysakowski@poczta.onet.pl

October 2
Tass, Hungary
Arva Janos Memorial F1A, F1B, F1C. Contact: Arva Janos, Scherer Ferenc ut 7, 5700 Gyula, Hungary, email: ani@gyulahus.hu

October 3
Crivelle, TO,
Italy
11th Coppa Guibo Fea. Entry fee €20. Contact: Giulio Gastaldo, Strada Nuovatetti 25/B, 10038 Rivoli, Italy, tel: +39 011 95 36 819, fax: +39 011 415 57 44

October 4-9
Slanic Prahova,
Romania
Indoor World Championships F1D senior and junior.

October 8-9
Oberkotzau,
Germany
Oberkotzau World Cup event F1E. Entry fees: €30. Contact: Peter Kuttler, Schneebergstr. 26, 95145 Oberkotzau, Germany, tel: +49 9286 61 87, email: peter-kuttler@web.de

October 9-10
Oberkotzau,
Germany
Föhrberg cup World Cup event F1E. Entry fees: €30. Contact: Peter Kuttler, see entry for October 8.

October 15-17
Sacramento,
USA
Sierra Cup. World Cup event F1A, F1B, F1C, F1G, F1H, F1J. Entry fees: US\$45 for one event, US\$60 for 2 events. Contact: M McKeever, 4252 Mockingbird St., Fair Oaks, CA 93628, USA, t: +1 916 967 9475

October 16-17
Zagreb, Croatia
Memorijal Vilima Kmocha. World Cup event F1A, F1B, F1C. Entry fees: €25. Modelarski klub Zapresic. Contact: Damir Kmoch, A.G. Matosa 6, 10410 Velika Gorica, Croatia, t: +385 01 62 52 035, fax: +385 01 3310 403

November 8-10
Novo Mesto,
Sent Jernej,
Slovenia
Krka Cup. World Cup event F1A, F1B, F1C. Entry fees: €25. Aeroclub Novo Mesto. Contact: Damjan Zulic, Nahtigalova 5, 8000 Novo Mesto, Slovenia, tel: +386 41 610 737 or 33 75 700, fax: +386 7 33 75 701 or 7 33 78 444, email: damjan.zulic@insert.si, web: <http://freeweb.siol.net/zulicbor/krkacup.htm>

FREE FLIGHT FORUM

Report by Ian Kaynes.

This year's Forum was run by Martin Dilly and Mike Evatt on November 23 at Holiday Inn, Coventry. The very full programme started with John Barker talking about catapult gliders. John explained that the class was introduced to BMFA rules to reach a wider field of participants than those who have arms good enough for HLG. He showed the models he had developed, with a T-tail to allow holding the model further forward, and a tip-wing DT. John uses Gurney flaps for more controllable trim adjustment than is possible by bending surfaces and consequently can have the grain following the direction of the swept leading edge and grain at an angle to the trailing edge - stiffer and not possible to bend. He follows a wing shaping idea introduced by Phil Ball, carving the blank to a triangular section, cutting the outline and then, to guide carving to section, the leading edge height defines the maximum thickness at each span position.

Peter Watson showed the drum sander he developed for sanding sheets for sheet-wing power models. The sanding paper was from self-adhesive roll by 3M with the drum driven by a Black & Decker drill mounted on an adjustable table. The sheets were finished by sanding between metal height guides on a glass sheet.

John Cooper was next on talking about A1 / F1H gliders. He said the gliders had been much more pleasant to fly when the weight was 150g rather than 220g, which makes them more critical to trim, difficult to tow in the calm, not sensitive to lift on the line, and inconsistent (but fast) DTs. John makes his D-Box with 2 layers of 60g kevlar, the size being small enough to cure in a domestic oven. Bunt trim is very sensitive, John prefers to give a longer more gentle bunt timed with an F1B clockwork timer. The gliders tended to be a stage behind F1A in technology. The latest electronic models could get 40ft higher and would dominate the class if used in British comps, a reason not to change builder of model rule in domestic rules.

Visiting from Germany, Gerhard Wobbeking described aerofoil testing by flying CO2 models in the CargoLifter hall. Three Coco models (like he used to win the British Nationals in 1994) were identical except for different wing sections. CO2 motors allow testing which is much more repeatable than would be possible with rubber motors. The wing chord was 120mm and at an air speed of 3.5 m/sec this gave a Reynolds number of about 30,000. The outdoor settings on all the models were found to have made then over-elevated when the flight pattern could be studied indoors. A basic G0495 section was found to be improved by adding a thread turbulator and times got better again (up to 303 sec) when this was replaced by a 3d zig-zag turbulator. A similar trend but much longer flight times were found with the Schwartzbach section, going up from a

plain wing time of 314 sec to 325 with thread turbulator and 357 with the 3d turbulator. The third section, Qinfei, which is used in the Coco kit, was between the other two sections with a best time of 333 sec. The 3d turbulator which was found so effective was a narrow strip of 0.6mm balsa with the leading edge cut to a zig-zag with pinking shears and stuck to the wing with self-adhesive tape.

Stafford Screen described how he set up his power models to accurate incidence settings for first flight. A stand supported the front of the model via two metal plates fitted between the fuselage and the wing through which the joiners passed. Another support under the fin brought the model close to horizontal and an electronic spirit level (bought in USA) allowed the incidence of wing and tailplane to be measured accurately within 0.1°.

Phil Ball and Andy Hewitt talked about their development of large discus-launch HLGs for free flight. First exposure to discus-launch RC gliders had been during the trip to USA for the 2001 World Champs. The RC models are typically 60" span, are launched by holding the wing tip, spinning round discus style, released after two turns, the models climb and the transition is then controlled by radio. Phil and Andy developed models in collaboration but following their own designs. An extended fin and offset rudder was needed to keep the model straight after launch, opposing the rolling effect of differential lift on the turning model. A throw tab on the wing carried a line release for the timer, with a delay of 0.6 sec tail down and rudder change later. They described the models as getting as high as conventional HLG but with 20% of the effort. The still air time was estimated at about 2 min, but not yet measured. Andy launched his models holding the left wing tip and rotating anti-clockwise viewed from above, like a control-line model, but left-handed Phil rotates the opposite way.

After a buffet lunch, Gerhard was on again and started the afternoon session talking about his tailplane section. On an F1A a 60% Clark Y tail section was found to give too much lift in circle tow (and so lost height in the circles), too much lift in zoom launch, and poor stability in rough weather and strong thermals. He translated these problems as the section having too high a lift curve slope, too much sensitivity to Reynolds number (20,000 in glide, 40,000 during zoom), and too much lift at high incidence. He looked at other aerofoils, like HLG with a forward high point and straight upper surface to the trailing edge, and found some of the characteristics he wanted in the Go625 in the book by Schmitz. This section was 15% thick, but Gerhard deduced from the symmetric C_L values that he could use half of the section and this gave his well-known 8% thick blunt-nose section. This was used by Lepp in 1989 and 1990 then adopted for F1B by Andriukov to win the 1991 World Champs and World Cup. By testing six different tailplanes Gerhard had found that tailplane aspect ratio made little difference, the section was the important feature.

Gerhard then continued by talking about his experiences with a high thrust line slow open power model. This design had worked well on an old engine, but with a more powerful OS motor it had needed lots of downthrust and was reluctant to climb. This was solved by changing tailplane section, in this case to a Wortmann M2 (maximum camber 5% at 25% chord and an undercambered lower surface). This gave a very stable climb with no downthrust, decalage of 1.5° and CG at 71%. There are now 12 models with this configuration in Germany. The tail section has also been used on P30 rubber models.

Ray Jones then talked about thermal detection. Prepared in conjunction with Chris Edge, this was an account of the British team experiences in Hungary with the new detection equipment purchased by BMFA from Fuzuyev. He showed the combined windspeed and temperature traces from F1B and F1C days with markers where British flyers had launched.

There were some questions about finding the optimum sensitivities and ranges, but Ray stressed that it was valuable to have the traces as a record to help understand the weather during a day.

Stuart Lodge then explained the space model class of boost glider. From a simple model similar to an HLG, developments to cover the very different speed ranges between the boost phase and the glide phase had led to a swing wing model with folding tips.

John Worsley described his development of a beeper to aid finding models hidden in the undergrowth on Chobham Common. This used an LED circuit as an interrupter for the sound and also to provide a visible flashing and a switch to activate after DT. Using components from Maplin the assembly weighed about 5g. During discussions John O'Donnell reported that musical Christmas cards gave a source of a complete and light sound source with enough volume to be useful.

Russell Peers described his method of manufacturing F1B spars. This included sticking the 3/16" vertical grain balsa core to one web, then finishing and adding the other web with the assemblies clamped together.

Peter Watson showed his new style power model starter, based on the ideas of Gil Morris. This was much more practical than the old rectangular box, being both lighter to transport and to carry around the field and also easier to use.

Mark Benns talked about his experiences this year in HLG flying and showed his models. He started at the Crawley indoor meeting where he had flown his 7.1g model, but this could easily reach the ceiling and ideally a model 1g lighter would be more suitable. His British Nats models had a V-tail set skewed to turn the model and no warps needed on the wing. At the Millenium Dome in June, the Australian Len Surtees had shown the top standard with 73 seconds from a 20g model. Catapult glider was flown, Mark now using asymmetric wings for improved pattern and tip weight to cause turn. He uses old grey FAI rubber for maximum power at short stretch and reached about 35m altitude, for a two-flight total of 169 sec.

Mike Evatt closed the day with a talk about F1B props and rubber testing. He showed the effect on local pitch angle from rotating a prop $\pm 3^\circ$: the Andriukov prop has a much smaller change at the root than a helical pitch prop. Mike compared his results from rubber testing with those from Fred Pearce and from Richard Blackham as reported in the 2003 NFFS Symposium Report. Testing various batches since 1997, amongst the variability there were some consistent differences (Blackham highest, Pearce lowest) and a general indication of a slight reduction with the most recent batches of rubber compared to the best Tan 2.

Watch out next year for the publication of the report from this Forum.

CORRESPONDENCE

From Disgusted, Tunbridge Wells:

At the Free Flight Forum Phil Ball and Andy Hewitt showed us their 6ft chuck gliders that are launched, holding the wing tips, with discus-like motion.

I really must protest that this round-arm action is not cricket. We want an immediate return to the proper over-arm throwing action. Otherwise the HLG box at the Nationals is going to be filled with swirling dervishes trying to decapitate each other or hopefully screwing themselves (into the ground).

I suggest an instant ban as otherwise heads will roll at Barkston Heath next May.

M Riggs

EURO-FLY 2003, MÜHLENTHURNEN, SWITZERLAND, NOVEMBER 1-2

F1A 70 flew

1	M Bleuer (J)	SUI	1320	+420	+492
2	A Van Wallende	NED	1320	+420	+111
3	C Bachmann	SUI	1320	+302	
4	O Pshenychnyy	UKR	1320	+267	
5	M Kochkarev	RUS	1320	+197	
6	M Omrcen	CRO	1320	+187	
7	S Chabot	FRA	1320	+167	
8	S Makarov	RUS	1320	+152	
9	A Van Eldik	NED	1320	+148	
10	T Weimer	GER	1320	+139	
11	A Rink	GER	1320	+123	
12	S Jakutis	LTU	1308		
13	P Findahl	SWE	1305		
14	L Bajorat (J)	GER	1304		
15	I Kreetz	NED	1297		
16	A Hacken	NED	1295		
17	D Seren (J)	GER	1283		
18	E Ragot	FRA	1267		
19	J Seren (J)	GER	1228		
20	B Rotteveel	NED	1223		

F1A-Junior 13 flew

1	M Bleuer	SUI	1320	+420	+492
2	L Bajorat	GER	1304		
3	D Seren	GER	1283		
4	J Seren	GER	1228		
5	V Vivchar	UKR	1207		

F1B 54 flew

1	B Silz	GER	1320	+268	
2	W Ghio	USA	1320	+251	
3	V Rosonoks	LAT	1320	+237	
4	M Kusterle	ITA	1320	+232	
5	C Fux (J)	GER	1320	+212	
6	R Trumpf	SUI	1320	+185	
7	I Vivchar	UKR	1320	+163	
8	W Klaus	AUT	1318		
9	M Seifert	GER	1311		
10	I Zilberg	GER	1308		
11	H Van Hoorn	NED	1301		
12	H Schoder	SUI	1295		
13	A Gey	GER	1285		
14	P Monninghoff	GER	1282		
15	P Windisch	GER	1278		
16	S Tedeschi	FRA	1274		
17	P Ruyter	NED	1267		
17	A Zeri	NED	1267		
19	Y Blazevyich	UKR	1265		
20	B Aslett	GBR	1264		

F1C 18 flew

1	C Wachtler	GER	1280		
2	T Niiranen	FIN	1260		
3	A Roux	FRA	1256		
4	D Meissnest	GER	1235		
5	A Grasy	LTU	1225		
6	R Truppe	AUT	1216		
7	S Seydel	GER	1208		
8	B Boutillier	FRA	1206		

INCIDENT AT KUNSZENTMIKLÓS

By Andrew Crisp

Wakefield day in the Voros Jenő event after the World Championships had the sort of weather many of us dream about – hot, little wind and plenty of lift. Not flying, and having done my retrieval duties, I lay in the grass with a cool drink watching the remaining action. Alex A had duly maxed out, and now set about doing some fine trimming for the

evening flyoff, where the lift would surely be less than in the heat of the day.

Having wound – pretty seriously, I should think, from the climb rate—he launched and went to his customary great height. There was no obvious lift and the model DTed from around 100ft up after 3 minutes or so. Drift was so low that he was able to catch the model. Humm, I thought, all very fine, but I think I've seen slower sinking, more open glides from Mr A.

A few minutes later Oleg Kulakovsky steps out into the flying area with two wound up models – Alex's models! They were flown one after the other on obviously low turns, but the height gained was enough to observe the glides, which were now much wider. Oleg effected minor tweaking, and the process was repeated. The glide was now perfect with vast circles and hint of deviation.

What happened in the flyoffs? Alex won by a few seconds in pretty flat conditions, so the glide refinement paid off.

Perhaps they work as a dual act. A sorts out the climb, K the glide. Certainly very few can compete with their continued excellent results.

NEWS FROM BMFA FF TECH COMMITTEE

1. FFTC for 2004

Mike Woodhouse, Chris Strachan and Dave Clarkson were re-elected unopposed to the FFTC. The committee for 2004 therefore remains unchanged. The functions of each of the members will be confirmed following their first meeting on 6th December.

2. Revisions to the BMFA Free Flight Calendar 2004.

Please note the following revisions to the calendar published in the last issue of FFn:-

- a) The F1E event on 2nd May has moved back to 9th May.
- b) The third Team Selection Event has moved from 2/3rd October forward to 25/26th September - Sculthorpe is unavailable in October.

3. Contest Results Service

Rod Briggins has kindly agreed to continue with the Results service for 2004. Rod has done a wonderful job on the results service over the past few years, and deserves our thanks and congratulations.

Rod can be contacted by Email if you require electronic copies of results :- rod@brigginsshaw.freemove.co.uk

As reported in last month's issue, a number of Award Certificates for the Area Centralised meetings have gone astray. One reason for this is that the office is sometimes unable to identify members from name and club alone—your BMFA number and address is required also.

Please can Area CD's ensure that their results to Rod include the contestants BMFA numbers and addresses.

4. Easter Meeting 2004

A reminder to all that the Event on Easter Saturday will also be for the 'Club Championships'. The Club Championship rules are set out in Rule 3.1.13, and the results are based upon a 'Plugge' scoring system. The Club's points for classification will be the total of the points gained by their highest placed competitor in the Open Glider, Open rubber and Open Power contests.

THE FUTURE HEALTH OF UK FREE FLIGHT 2004 AND BEYOND

Announcement

The Free Flight Technical Committee have been considering the future of Freeflight in the UK.

It is intended to hold a one day conference on the 13th March 2004 to discuss the relevant issues. The venue has yet to be confirmed but will be in the Midlands. A discussion document is set out below to allow you to consider a number of issues that the FFTC have identified. There may be others that you wish to bring to the conference.

All are welcome – Please put this date in your diary

Introduction

This paper has been produced by the Free Flight Technical Committee of the BMFA as a discussion document and the basis for a conference to be held in the Midlands on 13th March 2004. We hope that all the members of the UK free flight community will give serious consideration to the issues and possible solutions presented here.

We must emphasise two things:

- The contents of this paper are not in any way a fait accompli. The purpose is to stimulate thought and discussion so that March 13th can be as productive as possible. We hope that the issues can be further discussed and additional solutions identified.
- Although the paper is inevitably written in the context of UK and International Competition Free Flight we wish to include the vintage movements and sports flyers all of whom we know share our concerns. We hope that all of UK Free Flight will be well represented on the 13th March and will be buzzing with ideas and practical suggestions.

You are all welcome to bring your ideas to the conference. It is our intention to invite well known free flight flyers to make presentations of their ideas at the conference to help develop solutions.

Issues

It appears that Free Flight in the UK is ailing. Numbers are falling, flying sites are hard to find and keep and the competition/event program is fragmenting into a number of separate "scenes" of which the BMFA calendar is barely the leader and certainly not the backbone. If current trends continue event organisers will be providing for the free flight activities of a shrinking group of members who are too preoccupied with the detail of their participation to see the need and opportunity for change.

If nothing is done to address this Free Flight will end up with a diminished calendar with increasing gaps – a tendency that has been painfully visible in 2003. Vigorous development and running of domestic events and the essential defence and development of flying sites depends upon a much wider involvement of the Free Flight community. This paper lays out a way forward that needs to be implemented in the next few years if Free Flight, and particularly Free flight competition, is to remain a vigorous and widespread part of the UK aeromodelling scene.

Calendar

We need to address the situation where the FFTC is the co-ordinator but not the operator of the Calendar. There should be particular events run directly by the FFTC, namely:

- The Nationals
- International team Selection
- The Stonehenge Cup

No other events should be run directly. The rest of the BMFA Calendar should be run by the Areas/Clubs and should comprise:

- 6 decentralised meetings (as at present)
- 5 Area/Club galas (Northern and Western-now called Southern- plus 3 out of London, Eastern, Southern, Midland.)

It is suggested that The Winter Open and the Summer Mini might be incorporated into two of these events.

The role of the FFTC would be to secure the event organisers, underwrite event costs, co-ordinate dates, advise on content and allocate some of the awards (appropriate BMFA trophies) to these events.

The early provision of the BMFA calendar as the backbone of the UK Free Flight program would be essential. The calendar would be worked on a two year rolling basis starting with a blank calendar in January of year –2 and progressing to a completed version by August of year –1. The FFTC would act as a secretariat, maintaining the latest version of the developing calendar and working with the movers and shakers in the Areas, Clubs and Specialist Groups as they take up dates to provide an optimum programme with minimum clashes. The key to success is that people should want to be on the calendar and it must become the default option.

The success of the calendar process would depend upon wide and efficient publication. This would be an FFTC responsibility and might include:

Available on the web – both web site and email to a circulation

- From the BMFA office on request with an SAE
- The latest version available (with a small cover charge) at each meeting
- Distribution by event organisers as publicity for their own event
- Publication in the appropriate press channels

BMFA classes run at all these events would be included in the Senior Championship as considered appropriate by the FFTC.

Club Galas, specialist vintage and nostalgia events and the other free flight competition events, which comprise the rich selection of events currently run "outside" the BMFA calendar, should be considered in specifying the additional Area galas. Some of them may become the basis of those galas others will undoubtedly continue as separate events and every effort must be made to avoid clashes in the overall calendar. One key to avoidance of such clashes will be the early agreement of the BMFA calendar.

Classes

The BMFA classes would be those established classes as defined in the Rulebook. Experimental classes should be developed outside the BMFA classes and should be considered for subsequent inclusion based on their proven success rather than unproven enthusiasm. By the same token BMFA classes that have ceased to be viable should be removed from the Rulebook. However the overhead of small classes with established rules if very small and they are important to their enthusiasts. Careful consideration should be given before any events are discarded.

Various developments have successfully taken place in 2003. There are other subtle changes within the 2004 program. Any radical changes must come directly from the requirement of the membership. The purpose of the conference is to ascertain these needs.

The Nationals

This event is the premier event of the year and should become the focus of year calendar. We need to upgrade the total set up. As a move towards this in 2004 the FFTC have put the site organisation out to commercial tender, will be using a professional event organiser, this will free up the FFTC to organise the flying activities. We need to consider what improvements can be made.

Senior Championship

The Senior Championship would be the common BMFA linking thread through the new Calendar. The eligible classes at events would be those classes defined in the BMFA Rulebook, run in accordance with the procedures also defined therein. The list of eligible events would be published before the start of the season.

The Senior Championship could be revitalised by limiting scoring to one class on any one day and the best three scores in each class during the year. The scoring algorithm used should be published in advance.

Flying Sites

The airfield survey which has been undertaken in the last 18 months has shown that there are some, but few, opportunities to develop new sites. However to get from first contact to continued use takes local work and needs to be taken on under local leadership. This would fit in with an Area/Club responsibility for running their part of the competition program and is also the opportunity to develop local communal flying sites (Church Fenton is probably the best example of the sort of site use we envisage). This is the only way that site development can be done - with some central support from the FFTC/ BMFA officers helping by supporting individuals as they build local relationships. This local involvement in site development is especially necessary in developing opportunities on privately owned land (either ex-airfields or long term farm-land) or local authority areas, where there is no opportunity for central negotiation with the Military or Defence Estates.

It is also becoming increasingly apparent that many site administrators are keen to have an official relationship with an incumbent club to whom they can delegate authority for controlling the aeromodelling use of the site. It is inevitable with the current distribution of model flyers between disciplines that these will usually be radio clubs. Free flight has got to work out a method of working with this situation to secure access and avoid confrontation.

International teams

The selection and preparation of teams is an FFTC responsibility. As from the end of 2002 the team manager is appointed for a full year rather than for a single event, giving overlap and hand-over from one year to the next.

In future the team manager and assistant team manager might be responsible for the organisation of the team trials. In addition the team manager might be an ex officio member of the FFTC, attending all meetings and with full voting rights.

Thought and planning is needed to build on these principles and address issues of timing and hand-overs together with the possible desire of team managers to themselves to try for team places.

The FFTC must strengthen its approach to UK participation in international events without in any way reducing its focus on the domestic competition scene. The next step in doing this may be to establish a dedicated group with the objective of achieving a long-term improvement in UK performance.

Stonehenge Cup

The Stonehenge cup has become a regular feature on the international calendar. The event has won respect from a cadre of regular flyers from overseas. This event gives UK free flight an international status that it would otherwise not have. It is also fitting that the UK should host such an event reciprocating for the overseas events attended by many of our UK flyers.

FFTC Organisation

The FFTC membership in terms of numbers and appointment process could remain unaltered. However the establishment of four task groups with group leaders drawn from inside the FFTC or co-opted from outside as necessary could provide increased resources and effectiveness. These groups would

report back to the FFTC and liaise as necessary and appropriate to the time scales of their tasks. The groups might be: -

Group	Responsibilities	Membership
1. UK Calendar and Publicity	Preparation and publication Appointment of event organisers Senior and Club Championships Assistance with flying sites	Leader and members from inside FFTC
2. International Competitiveness and Teams	Team management Team selection (Senior & Junior) Excellence (improvement of all aspects of the UK international performance) Support (equipment and people)	Leader from outside FFTC and not the team manager. Team manager to be a member. Other members as appropriate
3. Stonehenge Cup	All planning and operation of the event (both competition and contest site control) Financial result	Leader from outside FFTC. Other members as appropriate
4. Nationals	All planning and operation of the event (both competition and contest site control) Financial result	Leader from inside FFTC. Other members as appropriate

In addition to working with these groups the FFTC, as a whole would retain responsibility for:

- The Rule book
- Accounts
- Secretarial and reporting back to Council
- Specific issues arising such as those in "Outstanding Issues" below

As well as increasing effectiveness these changes would allow the FFTC to devote more effort to being a catalyst for innovation and change

The BMFA Rulebook

The Rulebook must be reviewed and reduced in size and complexity, with particular care taken with how it sits alongside a Code of Practice for the conduct of events and the overlaps with the FAI rules. A top down redesign is needed which may require setting up a further task group.

As the Rulebook would continue to define BMFA Classes and the team selection process this redesign should take place in parallel with the changes proposed in this paper.

Running events

Events are often run in a way, which leads to less than ideal use of flying sites and more impact on the surrounding countryside than necessary. We should examine ways of being more flexible in what we do, ideas that readily come to mind are:

- 10.00am start. – more time to set up and prepare. However a dawn start for certain events may be appropriate.
- Morning fly-offs - a chance for the CD to use a calm morning.
- Flexible control of the maximum – at least set it carefully for the day, possibly go to flying in rounds
- More readiness to move control if conditions change and a requirement that all flights are made from a line of defined length – we too often "deliberately" fly out of the field or into villages because we are too idle to move.
- Flying from a line.

Some these ideas will be contentious but they need to be aired in order that the best way forward can be established.

A code of practice should be developed for the conduct of events and the guidance of organisers and CDs. This will be especially relevant when more events are run locally rather than by the direct appointees of the FFTC.

Other Outstanding Issues

There are a number of outstanding issues, which have been deliberately omitted from this paper but should not be forgotten as the new approach develops. They include:

- Increasing the visibility of FF and hence recruitment
- Builder of the Model
- Motorised retrieval
- Noise

Conclusion

The issues and possible solutions outlined above are those, which we feel, are fundamental to the future health of UK Free Flight. We ask all of you who read this paper and come to the conference on 13th March to consider whether these are the most important items and whether there are omissions that you wish to raise. You will notice that "Other Outstanding Issues" contains some very emotive topics. Whilst we agree that these are important we do not consider them to as fundamental as a sensible calendar, availability of flying fields and the distribution and sharing of flying site management and event organisation. We need to consider the health of the Free Flight ship and not get side tracked into simply moving deck chairs.

BMFA CHAMPIONSHIPS - FINAL RESULTS

1	P Ball	142.5	20	B Lavis	30.3
2	J O'Donnell	73	21=	G Sharp	29
3	T Grey	63	21=	M Dilly	29
4	N Allen	59	23	D Davitt	28
5	D Hipperson	58	24	P Watson	27
6	S Philpott	50	25=	F Rushby	25
7	S Screen	49.5	25=	P Woodhouse	25
8	P Harris	49	27	A Jack	24
9	A Ball	48	28=	A Hewitt	23
10	I Davitt	44	28=	R Heap	23
11	G Ferer	38	30	M Page	22
12	R Baggot	36	31=	D Clarkson	21
13=	C Strachan	34	31=	P Lang	21
13=	M Benns	34	33	J Cuthbert	19.5
13=	T Payne	34	34	G Peck	19
16=	J Cooper	33	35=	D Bartle	16
16=	R Peers	33	35=	E B. Jones	16
18=	J Carter	31	35=	J Godden	16
18=	R Brigginsshaw	31	35=	M Woolner	16

FALCONS GALA, BARKSTON HEATH, NOV 2

Report by Dave Hipperson

It was reassuring to be back on the comparative vastness of Barkston Heath after the serious limitations of North Luffenham had been again made so painfully obvious at the Brumfly a few weeks before. Barkston has been over used in the past and it would be foolish to do this again and not look diligently for suitable alternatives, however this year we have only been on it for the Nationals and judging by the continually escalating cost of the licence it may not for much longer be the Gala CD's favourite. Indeed this contest and the Coupe d'hiver International were seriously in doubt a few weeks before this when a PSA fee in the region of £500 was quoted. Intervention by the BMFA General Secretary quickly reined this back to a more appropriate figure but the truth has to be faced, PSA licences are getting very expensive.

Thanks to an enthusiastic contingent from the North, combined power (Timperley Rules) proved to be an excellent contest with a variety of approaches, remarkably little damage to models and a close finish. All the other classes should have offered an easier ride but they didn't draw. Early on, immediately after the rain had stopped, the wind was probably less than 10 mph but few were ready for it. It settled down at around 20 mph from the South West soon after the final very heavy downpour around 11am when Frank Rushby opened his account in combined power with a max. In general the early weather although calmest was the most difficulty to read and did for a few, including your reporter and Trevor Payne whose

massive Open Power model found itself out of balance laterally after extensive epoxy repairs to the D box in one wing half after damage at Brumfly. George Sharp spoilt a full score in Mini Vintage at this stage when his Senator fell out of the sky on the glide after a good climb. Undaunted he saw an opening in Open Rubber later in the day and flew the model again and won with a single flight despite a conservatively set DT. Robinson took Open Glider with a modern A2 thanks to a max on his last flight in the sunshine of the afternoon whereas Crisp had opted for a low aspect Nostalgia design which certainly could take the rough and tumble.

A few years ago a flyoff on such a day in what was essentially an Slow Open Power contest would have been most unlikely. On this day three qualified. Barnes' last flight had ended in the top of a tree at the far end of the field and so he was down to hastily assembling an untried reserve. Limbert had switched models after damage on the first flight and trim was slipping a bit by the last. It got worse in the flyoff. He launched first and illustrated what a knife edge business power flying can be. A slightly over elevated pattern worsened into a colossal stall off the top and then a long dive in poor air. He was down in less than a minute! Barnes still struggled with his PAW until he realised he was priming it with glow fuel and Rushby got his Norvel powered Creep away to its best flight of the day. Brian Eggleston its designer, who frightened us all by flying exactly this configuration with an ETA 29 at the 1962 Nationals on this actual drome, would have been proud of the flight. Every bit as quick as his, lighter by far and way up on its 12 sec run. Barnes was still struggling and now very tight for time. Not sure of the engine run, as the timer has stuck on the check, his launch to general applause, practically coincided with the hooter and despite the panic it got away perfectly only to have that timer fail again. One and all were dismayed to hear the motor run on and on finally cutting at over a minute and with no chance of a DT. No one saw it all the way down but estimates were that it was on its way back at around 7 minutes but still very high. Later that day it was found in the open by a lady exercising her dog not far from Sleaford - 6 miles away.

Frank Rusby's flight must have also been in mediocre air as it was down in less than 4 minutes from its stupendous height. This was Frank's third consecutive win at the Falcons combined power event and does underline the potential advantage of using a good Nostalgia model with its unrestricted motor and twelve seconds run. In Frank's case there was a certain amount of style involved too. As already mentioned he was the first man to fly and max then continued calmly all day walking the full length of the drome after each flight (no bikes, no car and certainly no moaning about the distances) pausing for lunch and still finding a useful slot after a nasty squall right at the end of the day for his last flight to be back well in time for the flyoff. While I was up the aforementioned downwind tree recovering Barnes' last flight there he was again walking back underneath me with his flyoff model. A classy performance and a perfect example to those that claim they can't do the retrieving. You don't have to go hell for leather just start promptly and walk!

As well as contest direction from John Cuthbert and Terry Dilks, thanks were due to Walt Hodgkinson who had liased with farmers and made sure the 'drome gate was opened in the morning. He locked up again after everyone had cleared and presented a demeanour that suggested he was more interested in the well being of the contestants than the time it was taking him. There was however one serious complaint to be recorded and it wasn't with the Falcons Club, it was with the contestants or rather the ones that didn't come. The ones that live comparatively locally and bleat when they have to drive further than usual because their precious 'local' drome isn't available. Well on this day it was, at great trouble and expense and they stayed away. True it was windy and wet too at the start but never a gale and neither had one been forecast. The current

concern in administrative circles seems to be finding venues. Do we need them if this is the turn out when an established club runs a traditional event with good prizes on a prime central location?

Combined Power 9 flew		<i>Mini Max 2.00 all others 2.30</i>	
1	F Rushby 7.30+3.47		Nostalgia
2	D Limbert 7.30+0.59		Slow Open
3	S Barnes 7.30+O/R		Slow Open
4	R Kenward 7.22		Open
5	T Payne 6.47		Open
6	D Hipperson 6.14		Slow Open
Open Glider		Mini Vintage Rubber	
1	P Robinson 4.45	1	J O'Donnell 6.00
2	A Crisp 4.23	2	G Sharp 5.47
3	G Peck 3.07	3	T Rushby 2.28
Open Rubber		Wakefield (F1B)	
1	G Sharp 2.25	1	B.Horsley 3.27
2	B Whitehead 1.53		

BMFA AUTUMN MINI, N. LUFFENHAM, NOV 9

Report by Dave Hipperson

We got lucky with this one. Expectations were not high for this date on such a tatty drome with all its obstructions. The wind forecast was to be from the very worst direction - a firm and chilly South Easterly and it certainly was so at the start but quickly veered the few critical degrees necessary to miss the worst hazards and then reduce, blowing under 10mph most of the day. Towards the end and for flyoffs, of which there were plenty, it was nearer 5 mph.

The early clear blue quickly clouded over to a sullen overcast so the chances of strong lift were reduced. Control was set up in the absolute best of possible places. Novel but clear thinking gave us a few more hundred yards space here so with the 2 minute max many got their flights in on the drome despite the close proximity of the boundary. Furthermore most of the time the trio of storage hangers on the perimeter could be avoided as to the copious quantities of fencing that now litter the place and, of course, the ever present threat of the golfers. They could all be avoided. Neither was there any sign of parascending activity and the radio control club over which we were flying seemed to pack up and go by lunch time - so really for Luffenham - no problems.

Attendance and hence entries were really very good but it was strange to see numbers in the ever popular P30 somewhat reduced and eclipsed even by E30 and ½A! Even with a five flight strategy for most of the classes many managed to fly in more than one as the drift dropped. Everything apart from the chuck glider events required flyoffs, although unusual to see such a small one in Mini Vintage. Most final flights represented close to straight up and down potential although both CO2 and CdH suffered from awkward turbulence and were below what might have been expected from the models that qualified. Shame too that after such a good day in FIJ/½A so many should decline to make their flyoffs flights when they could have greatly added to the spectacle.

The Walsall Club, who had volunteered to run the event, supplied plenty of man power and had added three Nostalgia events to the already full BMFA schedule. These were a good idea - especially the two flight arrangement - perfect when daylight is so short. Sadly though it was this aspect that voided them as far as league titles were concerned as they were never announced fully enough in this magazine to become official and hence results are not published here. Tony Hall presided over a comprehensive presentation at the end of the day when Biggles were also able to make awards for the ½A power and AI leagues that they run each year. In the case of power, which went to Pete Harris, an impressive looking wooden propeller - well worth trying for. A nice effort at the end by the organisation - just a pity that someone saw fit to run a noisy motor through some of it. Neither courteous nor appropriate

behaviour at any time but particularly when we are told sites are so easily lost from noise nuisance. Keep the extended ground running to your own sites please guys.

Recently a leaked BMFA document stated that the FFTC considered that and I quote. "They are barely the leader and certainly not the backbone of UK Free Flight". Well this contest, contrasting as it did with the potentially better but sparsely attended one the previous weekend, showed clearly this premise to be untrue and them to be wrong. Despite their self deprecation and the universally unpopular certificates as prizes, when the free flight contest fraternity votes with its entries it comes down squarely in favour of official BMFA even, it would appear, when run on dicey sites and for out of date pieces of paper! Let us hope they recognise this now and give us plenty more of it in future years.

AI Glider 7 flew		Mini Vintage 9 flew	
1	B Lavis 10+3.22	1	I Davitt 10+3.06
2	J Cooper 10+2.49	2	M Sandersdon 10+3.05
3	R Heap 10+2.27	3	J O'Donnell 9.48
4	G Peck 9.17	4	J Godden 9.41
5	J Howick 8.57	5	J Northrop 9.34
6	J Carter 6.54	6	T Rushby 9.15
Coupe d'hiver 11 flew		HLG 6 flew	
1	T Grey 10+2.52	1	A Hewitt 6.11
2	D Hipperson 10+2.36	2	M Page 4.59
3	G Sharp 10+2.33	3	M Chapman 4.35
4	P Woodhouse 9.52	4	P Ball 4.34
5	A Longhurst 9.49	5	K Moseley 3.28
6	M Marshall 9.46	6	A Moorhouse 2.30
F1J + ½A Power 9 flew		Catapult Glider	
1	P Harris 10+4.43	1	P Ball 4.51
3	P Watson 10+4.24	2	P Tollhurst 3.19
3	J Bailey 10+4.07	3	A Hewitt 2.54
4	R Baggott 10+2.34	4	J Barker 2.47
5=	F Chiltern 10.00	CO2	
5=	G Fuller 10.00	1	I Davitt 10+2.48
5=	S Screen 10.00	2	S Philpott 10+2.42
P30		E30 8 flew	
1	J O'Donnell 6+3.53	1	R Briggingshaw 6+4.12
2	P Ball 6+3.13	2	T Grey 6+4.02
3	C Strachan 6+2.53	3	P Lang 6+2.58
4	A Longhurst 5.48	4	J Milner 6+2.37
5	D Davitt 3.51	5	H Perkins 6+2.44
6	H Perkins 2.41	6	A Dunsterville 6+1.00

OPEN RUBBER LEAGUE FINAL RESULTS

1	J.O'Donnell	9 9 8 6 6 4	38	9	P. Woodhouse	4 3	7
2	P.Ball	9 9 9 3 3	33	10	U.Wannop	6	6
3	G.Ferer	6 12 4 4 4 3 ½	30	11	C.Foster	2 12	5
4	J.Arnott	18 6	24	12	B.Horsley	4	4
5	W.Hodkinson	9 6 2 1	18	12=B.Martin	2 2	4	
6	G.Sharp	6 3 2 2	13	14	C.Chapman	1 2	3
7	B.Duncan	9	9	14=R.Pollard	3	3	
8	T.Dobson	8	8				

A total of 22 persons scored in the ten qualifying events. No one scored in them all, busiest were John O'Donnell and Gerry Ferer who scored in seven each.

The above awards the double points bonus at the British Nationals as the windiest event. They are shown in bold hence an 8, a 12 and an 18 appearing. There was some controversy as to whether the Easter meeting was windier than the Nationals. It would appear it was a very close thing. The opinions of contestants who were at both and not involved in the Open Rubber events were canvassed to get as impartial an opinion as possible. No system is perfect. Had the double points been awarded at the Easter Meeting instead it would not have altered the top three placings but would have moved Walt Hodkinson up to 4th and Jim Arnott down to 5th. (Underlined scores denote those throw away as contestants can only count their best performances).

Coincidentally the top three men all suffered loss, or catastrophic damage of a crucial model in the hands of the public at the Brumfly. None of them flew Open Rubber again! – i.e. at the final event, the Falcons Gala.

UK COMPETITION NEWS

CROOKHAM GALA 2004 will be held at Middle Wallop on Sunday 8th February 2004. Events will be (1) Mini Vintage to BMFA rules; (2) Combined SLOP and Open Electric to BMFA rules: SLOP (Glow) 10 second motor run, SLOP (Diesel) 12 sec run, Open Electric 30 sec run; (3) Combined glider Modern Gliders (BMFA rules), Classic/Vintage Gliders (SAM rules): Vintage Gliders (Before 31 Dec 1950) 100m line, Classic Gliders (Before 31 Dec 1960) 75m line, Modern Gliders 50m line Contest starts at 10.00. All classes will have 3 flights, maximum to be decided on the day. In all classes Fly off models MUST be the same classification as that used in the contest. Contact: John Thompson Tel. 01252 842471 or email: Johnd.Thompson@btinternet.com

WORLD CUP F1A F1B F1C FINAL RESULTS

numbers flying in:

			F1A	F1AJ	F1B	F1C
MM	Maxmen	USA	47	3	49	29
BC	Bear Cup	FIN	27	8	14	3
HL	Holiday on Ice	NOR	61	2	40	6
AC	AFFS Championship	AUS	12	1	14	3
SN	Southern Cross Cup	AUS	10	1	12	0

BL	Baltic Cup	LTU	55	13	17	12
ES	Estonian FF Cup	EST	41	10	13	8
SV	Srem Cup	YUG	16	6	6	2
JP	Jihocesky Pohar	CZE	94	17	38	11
PZ	Puszta Cup	HUN	100	14	44	16
PC	Prilep Brand Cup	MKD	12	3	6	0
DZ	Djordja Zigica	YUG	22	1	5	0
KZ	Cup of Kazan	RUS	60	6	43	16
GL	World Cup Gliwice	POL	24	5	0	0
KH	Kharkiv Cup	UKR	37	10	24	12
SC	Scania Cup	SWE	44	6	26	6
AN	Antonov Cup	UKR	38	12	27	13
HC	Huron Cup	CAN	9	0	3	1
DK	Nordic Cup of Denmark	DEN	41	4	17	2
VJ	Vörös Jeno Memorial	HUN	143	5	59	23
PT	Poitou	FRA	78	13	30	11
SW	Summer Cup	POL	24	10	9	8
VW	Volkswind	GER	74	16	28	11
IS	Israel Championship	ISR	89	24	14	1
UN	Una Cup	BIH	11	0	6	3
CC	Canada Cup	CAN	10	0	9	4
EF	Eifel Pokal	GER	76	16	47	14
AV	Cup of Aviaprom	RUS	57	6	28	12
VH	Taça von Hafe	POR	6	1	5	0
SH	Stonehenge Cup	GBR	35	4	24	8
CM	Castilla La Mancha	ESP	6	1	7	1
KC	Krka Cup	SLO	45	9	41	9
SR	Sierra Cup	USA	18	0	32	17
EM	Euro-Fly	SUI	70	13	54	18

World Cup 2003 F1A-Junior

1	Istvan Szentpeteri	HUN	152	SV-1	KC-1	VJ-1	SW-4	EF-5	JP-6	12	David Seren	GER	90
2	Matthew Cuthbert	GBR	150	HL-1	DK-1	SH-1	SC-3			13	Jan Samak	SVK	85
3	Janis Zarins	LAT	144	ES-1	SC-1	VW-2	BC-4	BL-5	EF-8	14	Oskars Grigals	LAT	84
4	Pavel Marakhovsky	UKR	131	CM-1	VH-1	AN-3	KH-3			15	Bostjan Bagari	SLO	83
5	Daniel Findahl	SWE	121	SW-2	SH-2	SC-2				16	Tadas Motiejunas	LTU	78
6	Tomasz Drozdowski	POL	119	GL-1	AN-2	VW-4				17	Veronika Vivchar	UKR	77
7	Eldar Ahmetov	EST	114	BC-1	BL-3	ES-3				18	Mario Wachtler	GER	73
8	Jan Letko	SVK	104	PZ-2	JP-3	GL-3				19	Viesturs Berzins	LAT	62
9	Brett Mitchell	AUS	100	AC-1	SN-1					20	Alar Mikhailov	EST	60
10	Vlad Pryanikov	RUS	91	KH-1	AV-2					21	Richard Jack	GBR	59
11	Lennart Bajorat	GER	90	EM-2	JP-4	EF-6	VW-8			22	Ofer Ben Noon	ISR	54

World Cup 2003 F1C

1	Artem Babenko	UKR	157	PZ-1	AN-1	AV-1	KH-3			28	Zbigniew Szablewski	POL	51
2	John Cuthbert	GBR	152	SC-1	SH-1	DK-1	BC-1	HL-3		29	Dave Thomas	AUS	50
3	Claus Gretter	GER	144	PT-1	ES-1	JP-2	PZ-5	BL-5	EF-5	29	Nedžad Pinjo	BIH	50
4	Gabor Zsengeller	HUN	128	KC-1	SV-1	PZ-4				31	Otniel Cohen	ISR	50
5	Alain Roux	FRA	126	EF-1	PT-2	EM-3	PZ-6			31	Miguel Cantso Luna	ESP	50
6	Juri Roots	EST	122	BL-2	BC-2	SC-2	ES-3			33	Dittmar Meissnest	GER	48
7	Andrei Kirilenko	USA	120	HC-1	CC-1	SR-7				34	Atae Yamasaki	JPN	44
8	Sigurd Seydel	GER	104	JP-1	PZ-3	EM-7				35	T. Niiranen	FIN	43
9	Roy Summersby	AUS	94	EF-3	PT-3	SH-3	SC-3	VW-3		36	Alexandr Drozdov	RUS	42
10	Claus - Peter Wachtler	GER	94	EM-1	VW-2					37	Igor Andriushenko	UKR	42
11	Gerhard Aringer	AUT	89	HL-1	EF-6	PZ-8				38	Aleks Vjacheslav	UKR	42
12	R Archer	USA	88	MM-2	SR-2					39	Franco Gradi	ITA	42
13	Bob Gutai	USA	85	CC-2	SR-4	MM-10				40	Mirko Karanovic	SCG	41
14	Alexandr Mikhaylenko	RUS	81	VJ-1	KZ-4	AV-6				41	Roger Baggott	GBR	41
15	Reinhard Truppe	AUT	78	KC-3	JP-4	EM-6	VJ-11			41	Edward Burek	POL	41
16	Sergey Katyba	UKR	70	KH-2	VJ-4	AN-4				43	Kaarle Kuukka	FIN	40
17	Eugene Verbitsky	UKR	67	SR-1	MM-14					44	Stan Hinds	AUS	40
18	Robertas Kiburtas	LTU	67	ES-2	BL-4					44	Kenan Jusufbasic	BIH	40
19	Alexander Molchanov	UKR	57	AV-3	KH-4					46	Bernard Boutillier	FRA	39
20	Marek Roman	POL	56	JP-3	SW-4					47	B Servaites	USA	38
21	Ed Keck	USA	55	MM-1						48	Peter Maurer	SUI	37
22	Anton Kislovskiy	RUS	53	KZ-1						49	N Poti	USA	35
23	Arunas Grasy	LTU	53	BL-3	EM-5					50	Uri Zilberstein	ISR	34
24	Volodymyr Sychov	UKR	53	AN-3	AV-5					51	D Galbreath	USA	32
25	Manfred Nogga	GER	52	VW-1	EF-2					52	Anatoly Kislovskiy	RUS	32
26	Robertas Seinauskas	LTU	52	BL-1						53	Piotr Plachetka	POL	31
26	Victor Semenyaga	UKR	52	KH-1						54	D Chesson	USA	30

World Cup 2003 F1A

1	Per Findahl	SWE	144	SC-1	SH-1	DK-2	VJ-3	BC-4	HL-8	SW-9	ES-12	EM-13		
2	Jari Valo	FIN	144	HL-1	CM-1	BC-2	EF-14	EM-22					35 Y Artemenko	UKR 65
3	Yuriy Titov	RUS	141	KC-1	VJ-2	KZ-2	IS-10	AV-8					36 M Kosonozhkin	RUS 63
4	Allard van Wallene	NED	138	DK-1	PT-2	EM-2	SC-4						37 M Urban	POL 62
5	Bohuslaw Ryz	CZE	138	JP-1	GL-1	VW-3	KC-10						38 P Witkowski	GER 61
6	Kimmo Kulmakko	FIN	134	BL-1	KC-2	CM-2	BC-9	ES-11	HL-20				39 H Salminen	FIN 60
7	Phil Mitchell	AUS	118	SN-1	AC-2	PT-4	DK-13						40 C Lenartowicz	CAN 60
8	Brian van Nest	USA	115	AC-1	SN-2	SR-4	KH-12	MM-13	HL-17				41 I Zavgorodny	UKR 59
9	Ivan Treger	SVK	108	DZ-1	VJ-4	GL-4							42 R Blagojevic	YUG 59
10	Sigitas Jakutis	LTU	107	ES-1	PZ-3	BL-6	SC-6	SW-8	EM-12				43 T Weimer	GER 58
11	Robert Sifleet	USA	102	HC-1	CC-3	MM-5							44 F Hofmann	GER 58
12	Mikhail Kochkarev	RUS	101	VJ-1	EM-5	AV-6	MM-16	HL-22	KZ-18				45 F Kerner	HUN 56
13	Christoph Bachmann	SUI	100	JP-3	PT-3	EM-3	KC-4	VJ-15					46 J Cooper	GBR 56
14	Victor Stamov	UKR	95	PZ-2	AV-3	AN-7	MM-21	HL-23	KH-7	VJ-8			47 I Kreetz	NED 55
15	P Marachovsky (J)	UKR	94	VH-1	CM-3	KH-12	AN-13						48 E Ahmetov (J)	EST 55
16	Ivan Bezak	SVK	92	DZ-2	JP-4	VJ-9	PZ-8						49 P Brun	USA 55
17	Maarten van Dijk	NED	90	MM-2	EF-4	JP-9	DK-7	HL-14	SH-18	SC-22			50 J Woolley	AUS 55
18	Andreas Rink	GER	88	PT-1	SC-8	DK-9	EM-11	JP-15	EF-22	VW-24			51 Y Shelef	ISR 54
19	Istvan Szentpeteri (J)	HUN	88	SV-1	KC-6	VJ-13							52 S Rumpp	GER 53
20	Matti Lihtamo	FIN	87	BC-1	ES-7	HL-10	DK-16	BL-20					53 M Bleuer (J)	SUI 53
21	Vladislav Lazarevich	UKR	85	SW-2	AV-5	HL-5	AN-5	ES-15	BL-21	KH-14			54 D Varhos	SWE 53
22	Evgeny Kantipaylo	UKR	80	ES-2	BL-7	KC-7	KH-8						55 C Breeman	BEL 52
23	Dirk Halbmeier	GER	79	BL-2	VW-6	HL-12	DK-11	ES-17	EM-21	EF-19			56 S Pankov	RUS 52
24	Gerhard Aringer	AUT	76	PZ-4	JP-5	VW-5	EF-5	VJ-24					57 J Parker	USA 52
25	Anton van Eldik	NED	74	KC-3	PZ-6	EM-9	JP-11	MM-12					58 J Zarins (J)	LAT 51
26	Oleg Stoev	UKR	74	PZ-1	KH-15	VW-18							59 D Grygoryev	UKR 51
27	Arno Hacken	NED	74	EF-1	EM-16	PT-18							60 I Kolumbet	UKR 51
28	Heikki Tahkapaa	FIN	73	DK-3	HL-6	BC-5	SC-10						61 C Ziober	POL 51
29	Jorg Schellhase	GER	73	HL-2	PT-7	VW-17							62 R Limberger	USA 50
30	Sergei Makarov	RUS	73	HL-3	KZ-6	EM-8							63 Z Nikolovski	MKD 50
31	Igor Fradkin	USA	70	CC-2	HC-3								64 V Morgan	AUS 50
32	Oleh Pshenychnyy	UKR	68	EM-4	EF-6	SW-7	AN-14						65 D Zulic	SLO 50
33	Vasily Bezchasny	UKR	67	KH-4	MM-6	SR-5	AV-14	AN-17					66 T Boiadjev	CAN 50
34	Robert Hellgren	SWE	66	SH-3	VJ-5	BL-17							67 T Drozdinski (J)	POL 49

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1	Bernd Silz	GER	162	EM-1	EF-1	JP-1	SC-1	DK-2	VJ-15	VW-3			32 Y Blazhevich	UKR 66
2	Anatoly Zastavenko	UKR	158	PZ-1	KH-1	AV-1	SW-1						33 R Khuziev	RUS 62
3	Alexander Andriukov	USA	158	VJ-1	SR-1	CC-1	HL-7	MM-14					34 M Woodhouse	GBR 57
4	Ivan Kolic	YUG	154	KC-1	PC-1	CM-1	SV-1	VJ-3	SR-6	PZ-9	DZ-2		35 E Gorban (J)	UKR 57
5	Walt Ghio	USA	152	MM-1	HL-1	EM-2	CC-2	SC-3	DK-7	SR-10			36 P Monninghoff	GER 56
6	Anselmo Zeri	NED	146	PT-1	DK-1	JP-2	SR-3	EF-5	VJ-6	SC-5	EM-17		37 I Zilberg	GER 56
7	Russell Peers	GBR	133	SH-1	VH-1	DK-3	BC-4	HL-10					38 V Rosonoks	LAT 55
8	Damjan Zulic	SLO	133	DZ-1	UN-1	KC-3							39 P Windisch	GER 55
9	Pim Ruyter	NED	122	VJ-2	SR-2	EF-3	MM-3	HL-3	PT-7	JP-9	SH-9	EM-17		
10	Don Blackam	AUS	122	AC-1	SN-1	VJ-9	MM-21						40 A Gey	GER 53
11	Laurynas Gircys (J)	LTU	111	BL-1	SW-2	PZ-8	ES-6	HL-18					41 B Eimar	SWE 53
12	Sergey Molchanov	UKR	103	AN-2	ES-2	BL-6							42 T Bond	AUS 52
13	Radoje Blagojevic	YUG	103	SV-2	PC-2	KC-5							43 V Man	ISR 51
14	Serge Tedeschi	FRA	102	VH-2	CM-2	PZ-6	PT-8	EF-9	EM-16	JP-19			44 O Weisfelner	ISR 51
15	Igor Vivchar	UKR	101	EF-2	AV-3	VJ-5	EM-7	SH-5	MM-8	AN-7	KH-9	PZ-18		
16	Oleg Kulakovsky	UKR	100	MM-2	PZ-4	AV-4	KH-5	SR-11	KZ-6				45 L Morgan	AUS 51
17	Tapio Linkosalo	FIN	100	ES-1	CC-3	BC-6	DK-8	BL-8					46 B Bijelic	YUG 49
18	Yrjo Waltonen	FIN	99	KC-2	PZ-3	VW-5	DK-6	BC-7	JP-11	HL-12	MM-24		47 B Piserchio	USA 47
19	Andrey Burdov	RUS	99	KZ-1	MM-4	HL-11	AV-2						48 V Urban (J)	CZE 46
20	Richard Blackam	AUS	97	AC-2	SN-3	DK-4	PT-5	MM-9	SC-7	VJ-20			49 P Sikora	AUS 45
21	Rolandas Mackus	LTU	94	PZ-2	SW-3	ES-5	VW-11	HL-20					50 D Wood	USA 45
22	Virginus Ivancikas	LTU	91	BL-2	ES-4	SW-4							51 R Trumpf	SUI 43
23	Stepan Stefanchuk	UKR	87	AN-1	HL-9	PZ-12	KH-6						52 P Th Skjulstad	NOR 43
24	Horst Wagner	AUT	86	VW-1	KC-4	PZ-21							53 B Aslett	GBR 43
25	Brian van Nest	USA	83	SN-2	AC-4	KH-10							54 O Kasyanenko (J)	UKR 43
26	Hans Schoder	SUI	79	PT-2	VW-7	EM-12							55 J Korsgaard	DEN 42
27	Henk van Hoorn	NED	77	JP-4	PT-4	EF-7	EM-11						56 D Greaves	GBR 42
28	Vladimir Vivchar	UKR	74	KH-2	PZ-10	EF-14	AN-10						57 M Solodov	RUS 41
29	Bob Biedron	USA	73	HC-1	MM-6								57 O Ben Noon (J)	ISR 41
30	Klaus Salzer	AUT	71	ES-3	EM-8	BL-7	SH-8	VJ-11	KC-20	PZ-13			59 N Kovalenko	UKR 40
31	Michael Woolner	GBR	71	BC-1	SH-6								60 M Cabaravdic	BIH 40