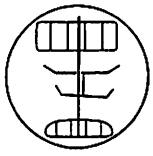
Indoor Flight International

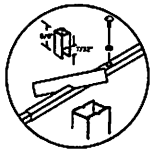
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THE LATEST NEWS AND INFORMATION ON INDOOR MODEL AVIATION.

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F1D model designed by Nick Aikman



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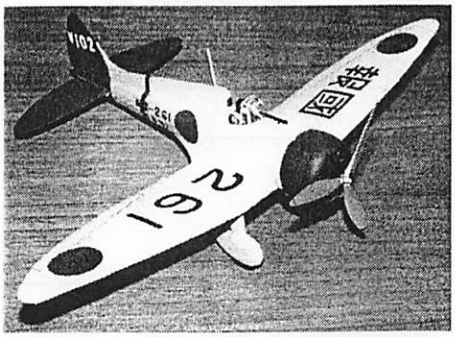
Contest Calendar

What & When	Where	Info
BMFA Indoor Duration Nationals 01-03.07.2003	London, U.K.	Tuesday July 1: Limited Penny Plane, No-Cal profile scale. Wednesday July 2: F1M and EZB. Thursday July 3: F1D (+ 1st trials for World champs team selection) and LRS.
Cardington Indoor 13.07.2003	Cardington, U.K.	F1D – see details elsewhere in this issue.
Kibbie Dome Annual 26-29.07.2003	Moscow Idaho, USA	Format will be like in the past with a relaxed atmosphere contest for all AMA and (normally) FAC indoor FF events. 12 hours of flying each day and not event slots you have to rush for. Light and heavy is flown at the same time under the 145' dome at opposite ends. 4 day fun fly style contest. All AMA and FAC events flown. F1D team selection regional.
Cardington Indoor 27.07.2003	Cardington, U.K.	EZB – see details elsewhere in this issue.
Cardington Indoor 03.08.2003	Cardington, U.K.	LPP – see details elsewhere in this issue.
Canadian Freeflight Indoor Nationals 09-10.08.03	Oakville, Ontario, Canada	Contest is flown at Sheridan College, 1430 Trafalgar Road, Oakville, Ontario, Canada **Saturday 9th August** 8am – 10am: Standard and unlimited Catapult Glider 10am – 3pm: LPP, Penny Plane, Manhattan Cabin, LRS, F1L, F1M 3 pm - 6pm: Bostonian, No-Cal (6.2 grams), FAC Peanut, FAC High Wing Peanut, FAC Scale, FAC Golden Age Scale, Dime Scale, Blatter 40 **Sunday 10th August** 9am – 11am: Continue Scale Classes 11am – 2pm: F1D 2pm - 5pm: Int. Stick, ROG Stick, Easy-B 5pm: Closing and Awards Contact Fred Tellier at 3160 Sussex Crt., Windsor On N8T2C6 E-mail: fred-tellier@cogeco.ca or look at http://indoor-models-canada.tripod.com
Junior event and open contest 9-10.08.2003	CargoLifter, Brand, Germany	**THIS EVENT IS CANCELLED!!!** Contact Gerhard Woebbeking at woebbeking@t-online.de for more details.
West Baden 15-18.08.2003	West Baden, Indiana, USA	Dates are August 15, 16, and 17, with 14th. of August a set-up day but no flying. It will most likely be a record trials. Watch on indoorduration.com for updates.
Cardington Indoor 31.08.03	Cardington, U.K.	EZB – see details elsewhere in this issue.
5th. Copa Tabarca 6-7.09.2003	Alicante, Spain	F1D, F1L, F1M + scale F4D,F4F. Entry fee EUR 15.- The flying hall is 9.6 m high and the roof is curved with a wooden surface. Contact: Fernando Haro Martinez, C/ San Benito 2 3-D, 03013 Alicante, Spain Tel +34-965208587 or e-mail at: clubsaf15@hotmail.com
Cardington Indoor 07.09.2003	Cardington, U.K.	Any other purpose, fun fly/delayed trials etc. See details elsewhere in this issue.
German open 13-14.09.2003	CargoLifter, Brand, Germany	Open German Championships F1D, F1L, F1M, F1M-L, F1D-P1 Contact Gerhard Woebbeking at woebbeking@t-online.de for more details, or see details elsewhere in this issue.
Cardington Indoor 28.09.2003	Cardington, U.K.	Any other purpose, fun fly/delayed trials etc. See details elsewhere in this issue.
European Championships and Open International 02-05.10.2003	CargoLifter, Brand, Germany	European Champs in F1D, 2 pm - 8 pm every day Open International: F1D, F1L, F1M Contact Gerhard Woebbeking at woebbeking@t-online.de Address: Holstenstr. 108, 22767 Hamburg, Germany Telephone: +49 (0) 40 38 98 310 / +49 173 93 53 869
Butterfly Meeting 18.10.2003	Nijmegen, Netherlands	Contest will be flown in the Jan Massinkhal (smooth ceiling, about 10 metres high) in Nijmegen from 12-17 hours; official classes will be F1M, (F)Looper Contact Thedo Andre at Thedo.Andre@net.HCC.nl for more details
Indoor Contest 09.11.2003	Schorndorf, Germany	F1M, F1M-L, Mini-Stick - Hall 5,8 m high Contact Bernhard Schwendemann at BeSchwende@aol.com

BMFA Indoor Scale Nationals, 27th April 2003

By Mike Stuart (UK) from http://www.thestuarts.freeserve.co.uk/ with his permission

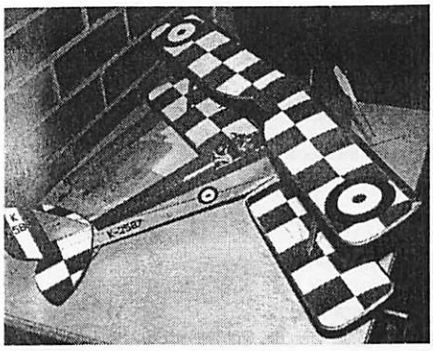
One of the highlights of the free flight scale modelling year for me is always



Mitsubishi Claude Photo by Mike Stuart

the BMFA Indoor Nationals and this year's event was as enjoyable as always. The best thing about the event is chatting to fellow modellers and seeing old friends again. It is a real luxury to be able to talk modelling all day with fellow enthusiasts. In my humble opinion, you couldn't wish to meet a nicer bunch of people!

Entries were slightly down on last year - 50 compared to 52, but quite a few new models were in evidence, and there was a dramatic revival in the Pistachio class, which had no less than 10 entries this time. As usual there was fun flying in the other hall and SAMS Models in attendance, making it a good day out for those who did not enter the competitions. The Air Race and mass launch were also run again with entry open to all.



H.82 Tiger Moth Photo by Mike Stuart

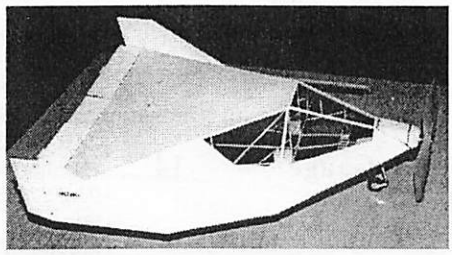
The Open Rubber and CO2 / Electric classes have a total based on flight score plus static score, split 50/50. Four flights can be made and the score from the best flight counts. To qualify, you have to make a flight of only 15 seconds. The flights are judged on realism in the various stages of the flight, i.e. take off, climb out, cruise, approach and landing.

No extra points are given for longer flights than 15 seconds. As always, it is a fine balancing act between weight and detail.

The Peanut (13" wing span) and Pistachio (8" span) classes have different rules, in that the flying scores do depend on flight time. Realism in flight is not judged, just the time it stays up. You get a ten second bonus if you ROG (Rise Off Ground). Four timed flights are made, and the best two are added together to give you a flight score (in seconds). The models are ranked in order of flight performance, and also in order of static judging. Bonus points are given in the latter for such features as multiple wings, scale rib spacing, having a pilot, separate control surfaces, exposed engine detail etc. The final positions are obtained by adding the flight position to the static position - lowest score wins.

This year I entered my Mitsubishi Claude in the Open Rubber class, as I had finally managed to persuade it to keep away from the walls when flown indoors, and my new Corben Super Ace in the Peanut Scale class. Both flew fairly well, The Claude eventually finishing 6th. Here is a shot of it with the new scale prop I had hurredly made the day before the contest. The Corben finished up well down the field in the Peanut class, but I had a lot of fun flying it.

Derek Knight won the Open Rubber class with an extensively rebuilt and repainted version of his Electric D.H.82 Tiger Moth. As it flew round, you could swear it was still electric powered, but the whirring noise came from the neat gearbox installed behind the nose block. The first two flights were affected by a slight stall, but



Facetmobile Photo by Mike Stuart

Derek fixed this for the two second round flights, which were both excellent.

Derek's electric powered Bristol M1B, powered by three geared KP-00 motors, was also flying very nicely. The model finished third in class with a very impressive points tally.

One of the real crowd-pleasers from the event was Chris Strachan's rubber powered Facetmobile. This odd machine could best be described as a home-built lifting body, without any conventional wings or tailplane. This is Chris's second Facetmobile model, and based on his experiences with the first one, he had reinforced some of the fuselage structure with carbon fibre to

Colophon

Indoor Flight International is published 4 to 6 times a year and covers all types of indoor models from peanut to microfilm. Texts can be sent in English, French or German and word processed documents can be sent on floppy disks in any text format. Computer drawings should be in Autocad .dwg (saved as Autocad v14 compatible) or .dxf formats and if you are no draftsman, I can do the drawings.

Payment of subscriptions should be in the form of an international money order in Euros or in cash (American $ or Euros). It is also possible to pay per creditcard online - see the website *http://www.indoorflight.com* for more details!

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(or US$ 20,-)

stop the tissue distorting them.

The flying behaviour was rather eccentric, as the model took off steeply pointing straight at the far wall, turning slightly right. Just before it hit the wall, it turned sharp left, and picked up a nice left hand circling pattern, before straightening up to land. As Charlie Newman pointed out in his flight commentry, Radio assist should not really be allowed at an indoor free flight event!

I have a soft spot for Waco cabin biplanes, and Peter Boys brought along a beautiful new Peanut scale VKS 6/7 model. The model got a very good static score, and a best flight of 35 seconds.

Richard Crossley built a delightful Pistachio scale model of the Martynside Semiquaver from foam. The realistic wing ribs are just airbrushed on (very convincingly). The small span made for quite a large model (by Pistachio standards). Completely untrimmed before the event, Richard soon got it flying after adding quite a lot of noseweight (to the propellor hub). The model came joint top in static, and finished 2nd overall. Best flight was 26 seconds.

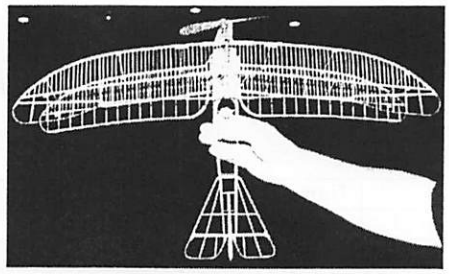


Martynside Semiquaver Photo by Mike Stuart

Peter Smart entered a beautifully finished De Havilland D.H.6 in the Electric/CO_2 class. Power was from a Gasparin CO_2 motor. Peter also had his Piper Cheyenne flying extremely well in the open rubber class, and it was getting quite a lot more height than last year. The model eventually placed fourth in class.

Mike Goldby's familiar D.H.9A was flying as well as I have seen it. The model got the top static score, and when added to the marks from the flight during which these pictures were taken, the total was good enough for first place in class.

Divs Masters came second in Open Rubber with his marvellously detailed Sopwith Triplane. This model got the highest static score in the class and flew excellently.



DFW B1 Photo by Mike Stuart

Peter Iliffe brought along the bones of his latest masterpiece for us to look at. This one is a DFW B1 built with a scale structure - you can see that Peter likes cutting wing ribs out! Weight so far is 40 grams, not at all bad considering the large wing area. Power will be a Gasparin GM 120 CO_2 motor.

The mass launch was won by Ken Bates, and Nick Peppiatt and Bryan Stichbury won the air race. The Walsall MFC Harry Perrens Memorial Trophy was won by Steven Glass with his Douglas Skyray. And finally Reg Boor won the Aeroplane Monthly Trophy with his Bristol Brownie.

COMPLETE RESULTS

PEANUT SCALE

	Name	Model Type	Best 2 flights	Flying place	Static score	Static place	Total
1	Mike Hadland	Stampe S.V.4	118.6	3	127	4	7
2	Divs Masters	SE5a	82.2	8	135	1	9
3	Nick Peppiatt	Teft Contester	87.3	5	96	6	11
4	Phil Siddall	Valkyrie	88.0	4	93	7	11
5	Andy Sephton	Lacey M10	120.5	1	77	10	11
6	Peter Boys	Waco VKS6/7	68.8	10	128	3	13
7	David Prior	D.H.Hornet Moth	46.2	14	129	2	16
8	Chris Strachan	Hurlburt Hurricane	120	2	63	14	16
9	John Hovell	Alco Sport	86.9	6	65	13	19
10	Gerard Moore	Savoia S.13	0.0	15	108	5	20
11	Reg Boor	P-47 Thunderbolt	51.1	13	93	7	20
12	Mike Stuart	Corben Super Ace	61.8	11	80	9	20
13	Vibes Masters	Lacey M10	82	9	73	12	21
14	Lindsey Smith	Avia B.35	86.1	7	60	16	23
15	Bryan Stichbury	Samolot HL2	60	12	63	14	26
16	Mike Havard	Piper Vagabond	0.0	15	75	11	26

PISTACHIO SCALE

	Name	Model Type	Best 2 flights	Flying place	Static score	Static place	Total
1	Peter Frostick	P-51 Mustang	111.0	2	52	4	6
2	Richard Crossley	Martynside Semiquaver	52.0	6	64	1	7
3	Nick Peppiatt	Lippisch Storch	140.0	1	36	7	8
4	Peter Smart	ASK 14	109.0	4	50	5	9
5	Peter Boys	Stearman	8.0	10	64	1	11
6	Divs Masters	SE5a	49.0	8	60	3	11
7	Reg Boor	Bristol Brownie	50.0	7	50	5	12
8	Andy Sephton	Lacey M10	110	3	28	10	13
9	Mike Havard	Piper Vagabond	58.0	5	34	9	14
10	Bryan Stichbury	Lacey M10	38.0	9	36	7	16

RUBBER

	Name	Model Type	Best Flight	Static Score	Total
1	Derek Knight	D.H.82 Tiger Moth	1067.0	1047.0	2114.0
2	Divs Masters	Sopwith Triplane	1000.0	1098.0	2098.0
3	Mike Hadland	Waco SRE	1038.0	1027.0	2065.0
4	Peter Smart	Cessna Cheyenne	1062.6	924.0	1986.6
5	Andy Sephton	Lacey M10	1023.0	830.0	1853.0
6	Mike Stuart	Mitsubishi A5M Claude	884.0	782.0	1666.0
7	Vibes Masters	Lacey M10	865.0	666.0	1531.0
8	Lindsey Smith	Minnow	1023.0	483.0	1506.0
9	Chris Strachan	Facetmobile	652.0	725.0	1377.0
10	Reg Boor	Supermarine 300	0	802.0	802.0
11	Barrie Pursglove	Fairey Swordfish	0	783.0	783.0

ELECTRIC/C02

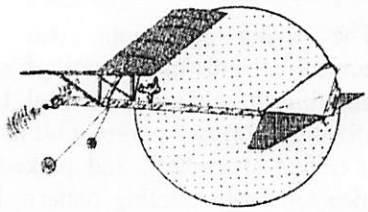
	Name	Model Type	Best Flight	Static Score	Total
1	Mike Goldby	D.H.9A	1076.0	1178.0	2254.0
2	Dave Causer	Sopwith Camel	1032.0	1090.5	2122.5
3	Derek Knight	Bristol M1B	1094.0	1019.5	2113.5
4	Divs Masters	SE5a	842.0	1050.0	1892.0
5	Steven Glass	Douglas Skyray	1119.0	750.5	1869.5
6	Peter Iliffe	Albatros D.V	668.0	1050.5	1718.5
7	Richard Mottram	Fokker E.III Eindecker	917.0	719.0	1636.0
8	Lindsey Smith	Maboussin Hemitere	576.0	507.0	1083.0
9	Peter Smart	D.H.6	669.5	0.0	669.5
10	Kevin Wallace	Nieuport XI Bebe	0.0	392.0	392.0

Results Hangar Rat

The results below are taken from S.W.O.O.T.

Class A

	Name	Country	Result
1	Akihiro Danjo	Japan	706
2	Don Slusarczyk	USA	657
3	Nestor Varela	Mexico	631
4	Ken Osborne	Australia	604
4	Angelica Moya	Mexico	604
5	Suzanne Hegarty	Australia	598
5	Luis Moya	Mexico	598
6	Amado Delgado	Mexico	593
7	Ricardo Bernal	Mexico	588
8	Michael Towell	Australia	551
9	Phil Whiteley	Australia	545
10	Danny Maslowicz	Australia	509
11	Damian Duchen	Argentina	260
12	Graham Main	New Zealand	248
13	Damian Schimpf	Argentina	214
14	Neil McLeod	Australia	197
15	Andy Chisholm	Canada	191
16	Bob Gladding	Canada	162
17	Horacio Silva	Argentina	124



Plans for this lovely model, including a construction article, can be found online at http://www.theplanpage.com/st.htm - download a copy and start building for next year's postal competition!

Class B

	Name	Country	Result
1	Andy Chisholm	Canada	309
2	Gary Sunderland	Australia	252
3	Jack Howe	Canada	203
4	Walter Innes	Canada	183
5	Eugen Fleischer	Canada	166

CargoLifter Contest Information

Gerhard Woebbeking

All CargoLifter contests are Open International Contests; entrance is always at 9 am with 3 flights on the first day from 1 pm to 8 pm and from 1 pm to 7 pm (6 pm for the German Nationals) on the second day. All classes will be flown. Catering available (sandwiches, pastry, drinks) in Self Service. Send in names of contestants per email to me at woebbeking@t-online.de so that I will be able to make a list for the safety personnel at the entrance. In a pinch, dial my mobile nr: 0049-175-2791790.

No entries were sent in for the Junior weekend planned on 9/10 August, so that will be a normal contest. A large party from the UK has enrolled; 28/29 June (German Ranking Contest) will have participation from several national teams (Hungary, Lithuania, Romania, Switzerland).

Contact:
Gerhard Woebbeking
Holstenstr. 108
22767 Hamburg
Germany
Tel. 0049-40-3898310
woebbeking@t-online.de

Entrance to the CargoLifter Hall	€ 10.-
German Nationals, 13/14 September – 1 class	€ 20.-
Further classes/all Classes on 28/29 June and 9/10 August	€ 10.-
Junior at German Nationals	€ 7,50
Junior at 28/29 June and 9/10 August – 1 class	€ 5.-
Further classes	€ 2,50

European Indoor Championship 2003 in the CargoLifter Hall.

Bernhard Schwendemann

The European Indoor Championships 2003 will be held in Brand, near to Berlin in Germany, in the world largest hall, the CargoLifter Werft. In parallel there will be an international indoor competition. All information is available on the website of the German freeflight magazine "THERMIKSENSE". During the E/C, the latest news about the contest and the results can be found online at http://www.thermiksense.de

European Championships F1D October 2nd – 5th, 2003

CargoLifter Werft, Berlin-Brand /Germany

Bulletin 1 - March 11th, 2003

The Organiser of the European Championships for F1D in 2003 is the Deutsche Aero Club e.V. with its subsidiary body, the Model Flying Commission and its department, the Free Flight Organisation. The Regional Air Sports Organisation of the county of Brandenburg will support the organiser.

The Flying Site will be the CargoLifter hangar at Brand, south of Berlin. The site and hangar will be open from October 2nd at 3.00 PM until October 5th at 10.00 PM. During this time, the European F1D Championships for seniors and juniors will take place as well as an Open International Indoor Competition for F1D, F1L and F1M classes. Because of ongoing negotiations with a new owner uncertainty about the date and the competitions is still remaining. There may be some production activity, despite the long weekend (October 3rd is a national holiday in Germany).

The Contest Director will be Gerhard Wöbbeking, assisted by Thomas Weimer, who will be heading the timekeepers' pool.

The FAI-Jury (and the Jury for the Open International) will consist of Pierre Chaussebourg (CIAM Vice President, FRA), Michael Ramel (Alternate CIAM Delegate GER) and Mike Colling (GBR). Reserve Luca Gialanella (ITA).

Eligibility for the European Championships. This is open to teams from the National Aero Clubs of Europe, including Turkey and Israel. All participants in the Open International must have a current FAI licence.

The Juniors Competition will take place at the same time as the senior event.

Entries for teams and timekeepers for the European Championships may be made until July 31st 2003. Entries should be sent to Michael Thoma, Deutscher Aero Club e.V. Hermann-Blenk-Str. 28, 38108 Braunschweig, Germany. Tel. 0049-531-2354056, Fax 0049-531-2354011, e-mail m.thoma@daec.de.

Entry fees shall be paid on spot. Only cash € will be accepted.

Entries for the Open International F1D, F1 L, and F1M may be made until September 20th.

The Official Languages for these contests are English and German.

Entry fees for European Championships.

For competitors (seniors) and Team Managers - 200 € (300 Swiss Francs).
For juniors up to 18 years - 170 € (255 Swiss Francs).
For supporters (seniors) - 30 € (45 Swiss Francs).
For junior supporters up to 18 years - 20 € (30 Swiss Francs)
For competitors in the Open Internationals (seniors) - 40 € for the first class, each other class 20 €.
For juniors up to 18 years – 30 € for the first class, each other class 15 € extra.

Banquet. 20 € for adults, 10 € for children under 14.

Timekeepers will get 144 € to cover board & lodging. Every National Team is free to nominate one timekeeper. The organisers will not provide any timekeepers for the Open International.

Processing of flying. European Championships competitors will collect two timekeepers from the pool. After each flight, if the timed duration is longer than one of that competitors previous best two flights, the model and rubber motor must be checked. Participants of the Open International will also follow this scheme. Their launching area will be separated.

Timetable.

October 2nd
15-20 h Registration of National Teams and individual participants of Open International. Practice flying.
21.30 h Team Managers Meeting at the Landhotel, Krausnick.

October 3rd
8-13 h Registration, Practice flying.
13.30 h Opening and briefing.
14-18 h Round 1.
16-20 h Round 2 (models must be launched before end of round)

October 4th
8-14 h Practice flying.
14-18 h Round 3.
16-20 h Round 4 (models must be launched before end of round).

October 5th
8-14 h Practice flying.
14-16.30 h Round 5.
15.30-18.00 h Round 6 (models must be launched before end of round).
20-24 h Banquet with prize-giving ceremony at the Landhotel , Krausnick.

Parking. In front of the northern entrance to the hangar. **Tables and chairs** will be provided.

Beverages and Snacks. (soft drinks, coffee, sandwiches, small sausages and cakes) will be available inside the hangar.

DeutscherAeroclub e.V. - ***Mitglied der Fédération Aeronautiqué International***
Sportfachgruppe Modellflug Fachausschuss Freiflug
(Vorsitzender Gerhard Wöbbeking, Holstenstraße 108, 22767 Hamburg, Tel. 040-3898310, woebbeking@t-online.de)

Board and Lodging near the CargoLifter Hangar Briesen – Brand

1. How to find the hangar and enter it.

The newly built CargoLifter hangar is on a former Russian airfield at Brand, south of Berlin and close to **Autobahn 13**, between Berlin in the North and Dresden in the south. Brand is roughly 40 kilometres from Schönefeld airport by road and Tegel airport is about 100 kilometers away. Heading south from Berlin on **Autobahn 13**, take **Exit Nr. 6** marked **Staakow**. The exit loops back over the Autobahn and a few kilometres to the east, the road passes Brand station and leads straight on to the airfield. There will be security guards present. The way to the parking lot in front of the hall is marked.
It is possible to use the train from Berlin to Brand, but the station is at a distance from the hangar and all hotels are several kilometres away, without any public transport available. There are no buses or taxis in the area.

2. Where to stay overnight.

Nearest to the CargoLifter hangar is the little village of **Krausnick** with a new conference hotel.

- Landhotel Krausnick, Dorfstr. 94, 15910 Krausnick. Phone 0049-35472-610, info@landhotel-krausnick.de, www.landhotel-krausnick.de (Special prices for the Euro Champs - single room € 38, double room € 56, breakfast included. In case the hotel is fully booked, it will find another place for you). The Team Managers Meeting and banquet will take place here.

There are good places to stay in **Köthen am See** nearby. There are two inns with rooms and flats and also, a Jugendherberge (Youth Hostel). Ask for prices of apartments for teams!

- Pension „Schafspelz" (with restaurant „Bärengewölbe"), Dorfstr. 16, 15748 Märkisch Buchholz OT Köthen. Phone 0049-33765-80396 (Single room € 40, double room € 63, breakfast not included).
- Kühn's Gasthof „Zum Köthener See", Dorfstr. 17, 15748 Märkisch Buchholz OT Köthen. Phone 0049-33765-80520.
- Jugendherberge, Dorfstr. 20, 15748 Märkisch Buchholz OT Köthen. Phone 0049-33765-80555, fax 0049-33765-84870 (Bed & Breakfast € 13, € 11 for juniors).

A few kilometres further away is the small town of **Märkisch Buchholz**.

- Garni Landhotel, Am Wiesenweg, 15748 Märkisch Buchholz. Phone 0049-33765-84906

More information can be obtained from the Fremdenverkehrsverein in Märkisch Buchholz. Phone 0049-33765-80635.

Ranglistenwettbewerb 28./29. June 2003- Cargo Lifter Werft

By Gerhard Woebbeking

Dear friends, printed below are the results of the F1D contest that was held at the CargoLifter Hangar last weekend. After finishing his 3 flights on Saturday Aurel Popa flew 41:41 as a World Record, but Marian Krause made (with one watch) 42:10 min and while we were discussing his time his model came to land! He refused to get a reflight. His Russian watch which had been used was about 10 seconds per hour late as well. He flew a wing with parabolic dihedral and visited Max Hacklinger before he built it. Hacklinger - using his old formulas - guessed a possible time of 41:47.
To be better than 8th a pilot had to beat the valid World Record of Peter Kuttler of 35:32 nearly twice.

Gerd Woebbeking

F1D

	Name	Surname	Nation		1. Flight	2. Flight	Total
1	Popa	Aurel	ROM		41:23	41:13	82:36
2	Krause	Marian	GER		42:10	39:21	81:31
3	Schramm	Lutz	GER		40:29	40:25	80:54
4	Kuttler	Peter	GER		39:59	39:57	79:56
5	Sukosd	Zoltan	HUN		37:27	35:46	73:13
6	Lotz	Rainer	GER		37:01	35:44	72:45
7	Siebenmann	Dieter	SUI		36:30	35:45	72:15
8	Botos	Istvan	HUN		35:03	33:23	68:26
9	Nimptsch	Werner	GER		34:37	33:26	68:03
10	Schönfelder	Karl	GER		33:16	33:12	66:28
11	Moraru	Aurel	ROM		32:22	32:01	64:23
12	Salogubovas	Vitalijus	LIT		30:40	30:39	61:19
13	Steponenas	Rimas	LIT		31:09	29:01	60:10
14	Jirasky	Jaroslav	CZE		30:01	29:36	59:37
15	Jirasky	Jan	CZE	J	29:46	29:03	58:49
16	Kaplan Jun.	Mikita	CZE		28:50	27:05	55:55
17	Wächter	Bruno	GER		28:46	26:09	54:55
18	Steponenas	Vilius	LIT	J	22:41	21:54	44:35
19	Kaplanova	Gabriela	CZE	J	21:46	21:29	43:15
20	Kaplanova	Klara	CZE	J	18:37	16:14	34:51

F1L

	Name	Surname	Nation		1. Flight	2. Flight	Total
1	Kaplanova	Klara	CZE	J	20:32	19:45	40:17
2	Kaplan Jun.	Mikita	CZE		20:57	18:57	39:54
3	Viezens	Ekkehard	GER		15:24	15:16	30:40

F1M Limited

	Name	Surname	Nation	1. Flight	2. Flight	Total
1	Weimer	Thomas	GER	13:06	12:25	25:31
2	Viezens	Ekkehard	GER	10:44	10:34	21:18

Ministick

	Name	Surname	Nation		1. Flight	2. Flight	Total
1	Kaplanova	Gabriela	CZE	J	10:17	10:12	20:29
2	Wächter	Bruno	GER		08:25	07:56	16:21

No Cal

	Name	Surname	Nation		Total
1	Lotz	Philipp	GER	J	05:31
2	Barr	Laurie	GBR		05:28

A TH Model in the CargoLifter Hall.

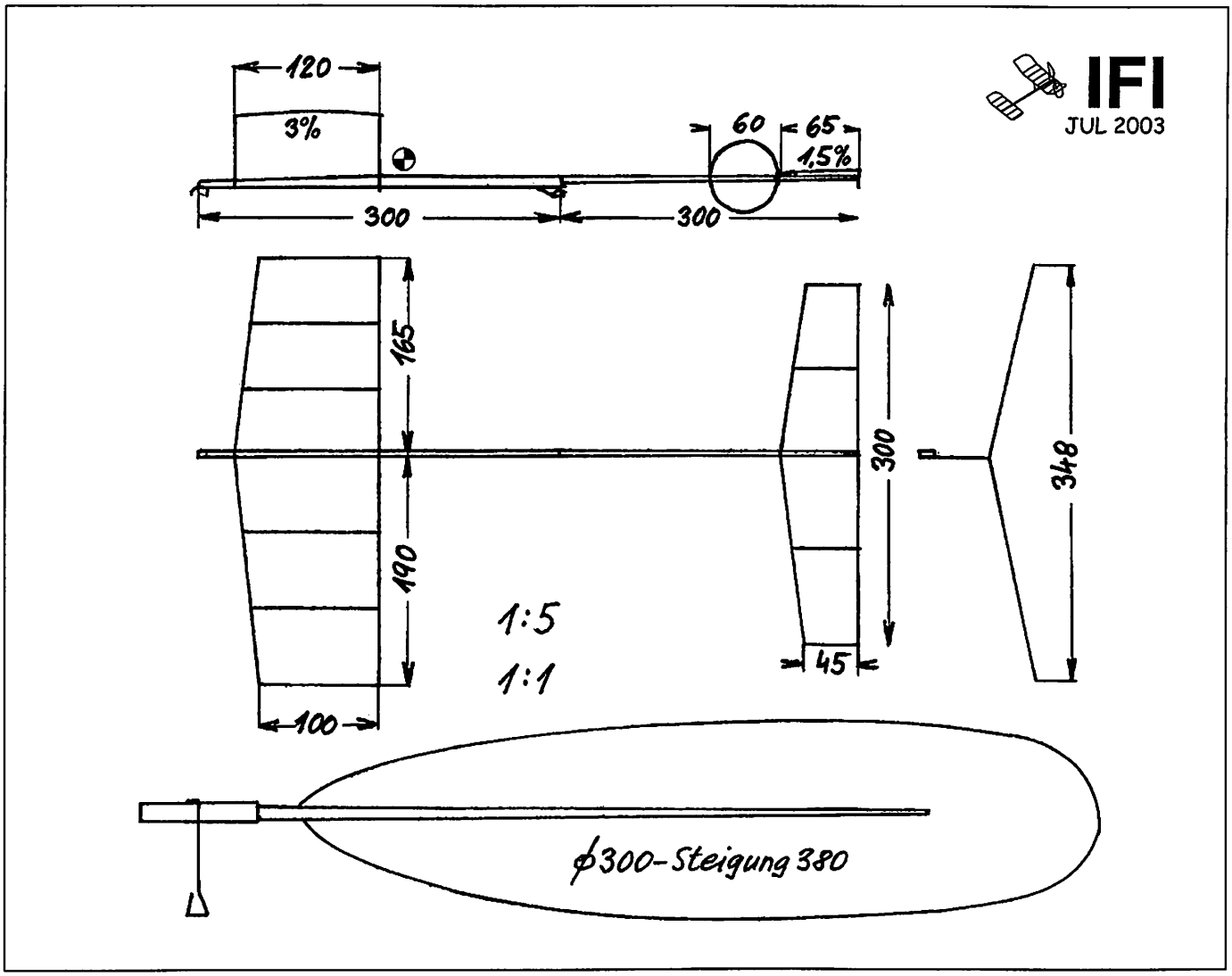
Actually, I only wanted to try to improve my personal high time in TH and see how long such a design would fly in the CargoLifter Hall. But since I didn't have a suitable model for such a high hall, I needed to build one. I decided to build a modified version of Alfred Klinck's beginners model.

On June 10th 2002, time had come to fly this model. After two promising test flights, I wound a F1M motor to a torque of 50 gcm at 2300 turns. The climb was phenomenal: the first 10 meters the model climbed vertically, hanging at its prop. From there on, the model slowed a bit but kept climbing higher and higher in widening circles. In the 8th minute of its flight, the model had reached the highest point at the West entrance where it hit the girders a couple of times. After that, the model descended and it ran out of turns halfway down - making a steep descent. The clock stopped at 11 minutes flight time. I decided to use an even longer motor; the model didn't climb as high but its flight time was higher at 13 minutes 20 seconds. The model was difficult to see at such a height. Thomas Weimer succeeded, Gerd Wöbbeking used binoculars - but I was hopelessly overstrained!

It seems that a model which uses the full height available won't fly the longest time - but the opposite still has to be proven!

The question remains: was it a height record?

B. Wächter



INDOOR FLYING at CARDINGTON & THE DOME

By Laurie Barr

Cardington: I am pleased to announce our program for this year for BMFA members only at Cardington. I am sorry it is so late, but we have had difficult problems in getting permission this year, and it is subject to the following conditions. If you are not already on my list, as a past Cardington flyer, then I will need your full name/address/BMFA number/phone/e-mail address.

The hanger is only flyable on days when the wind is 10 mph or less. The wind must be from any of the Southerly directions (any wind with any "northerly" direction is no good, unless the wind is virtually zero!). Also, if there is a lot of rain, the holes in the roof make indoor flying impossible. If you are not sure conditions are good enough, then call me on 01628 487544. If you are sure, conditions will be OK as outlined above, just come!

We fly in hanger No. 1, the battered old shed on your left, as you approach from the A600. Drive between both hangers, and turn left across the back of No. 1. At the end, turn left again, and half way down, you will see the ATG Ltd sign. Entry is gained via the large sliding door.

This door will be open at approx. 9.30 am, and shut at 11.00 am, so we do not create turbulence inside the hanger and break models already assembled or flying. Try to come between 9.30 and 11.00 am as we do not like our models being broken, by someone's lack of thought. If you have a valid reason for coming late, come in through this door on foot, only opening the door as least as possible and shut it immediately. Come and make contact with me to see if conditions allow late entry by car. Once the door is shut and flying starts, the door will remain shut until approx. 6.00 pm. We fly at the back end of the hanger, as Airships are moored in the front half.

We have a frictional relationship with one of the managers at ATG, who does not want us there at all and/or use his toilets! Please exercise the utmost care, and keep away from the airships. If we do any damage, we are finished!! Never climb any stairways without my express permission. Hard bats are advisory. Some are available on site.

The costs will not be more than £10.00 per person, to use the hanger, and this includes entry to our competitions. Gas for balloons will cost £5.00 per fill.

Indoor Duration Flying for 2003:

June 1: FIM, June 22: EZB
July 13: F1D, July 27: EZB
August 3: LPP, August 31: EZB
September 7 & 28: any other purpose, fun fly/delayed trials etc.

Indoor National Champs at the Dome: I am delighted to announce, our Indoor National Champs will take place in the Millennium Dome at Greenwich, London.

Contests.

Tuesday July 1: Limited Penny Plane, No-Cal profile scale.

Wednesday July 2: F1M and EZB.

Thursday July 3: F1D (to include 1st trials for World champs team selection) and Mini-Stick (Living room stick)

During this time, there will also be hlg and clg contests, being organised by Mark Benns. Contact him on 01733754277 or by e-mail on mark.benns@ntlworld.com for comp details, but I must also have your security details. We also invite dedicated indoor scale flyers (no internal combustion engines). Contact Charlie Newman on charlie@newman737.freeserve.co.uk , or phone- 01865 873020 to enlist.

This meeting is for BMFA members only; no one else can accompany you other than another BMFA member.

Results USIC F1D regional

These are the unofficial results from the USIC F1D regional. Congratulations to those who participated and to those who qualified for the finals.

	Participant	Best	2nd	Total	Regional pts
1	John Kagan	33:04	30:48	63:52	100.00
2	Tom Sova	30:43	30:25	61:08	95.72
3	Larry Calliau	30:46	30:07	60:53	95.33
4	Alan Cohen	27:50	27:24	55:14	86.48
5	Steven Richman	23:38	22:28	46:06	72.18
6	W. Leppard	22:51	19:00	41:51	65.53

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Bat out of Hell! – F1D by Nick Aikman

Component	Subcomponent	Details
Wing	Spars	55 x 35 → 100 x 35 → 55 x 35 –5.5 lb, B Grain
	Tips	55 x 32 → 30 x 30 → 55 x 32 – 5.0 lb, B Grain
	Ribs	Andrews 23 x 45 → 23 x 62 → 23 x 45 – 4.3 lb, C Grain
Tailplane	Spars	40 x 31 → 55 x 31 → 40 x 31 – 5.2 lb, A Grain
	Tips	40 x 31 → 40 x 27 → 40 x 31 – 4.4 lb, A grain
	Ribs	Andrews 22 x 28 → 22 x 48 → 22 x 28 – 4.2 lb, C Grain
Motorstick		0.25" dia. Blank 0.845" wide 0.013" - 4.2 lb – C Grain
Extension		0.25" dia. Blank 0.845" wide 0.010" - 3.9 lb – C Grain
Plug-in for boom		Trim to fit boom taper. 1.75" long 0.009" –4.2 lb, C Grain
Tailboom		Blank 0.845" wide → 0.50" wide 0.009" – 4.0 lb, C Grain
Wingposts		55 x 45 oval section – 5.2 lb, A Grain
Tailposts		45 x 38 oval section –5.2 lb, A Grain
Propeller	Spars	60 dia. → 30 dia. – 4.4 lb, A Grain
	Ribs	Andrews 2 are 22 x 24 → 22 x 50 → 22 x 24 – 4.5 lb, C Grain
		Constant 3 are 22 x 24 – 4.5 lb, C Grain
Covering		Y2K2 Applied with 3M "Spraymount"
Rubber		March '02 Tan2

Weights	
Wing	0.304
Tailplane	0.146
Motorstick + Extension + Posts	0.371
Boom + Posts	0.156
Propeller	0.190
Ballast	0.036
Total	1.202

BAT OUT OF HELL!	
U.K. CAT. IV F1D Official Record Holder 36:32 at the CargoLifter Hanger, Germany 15th September 2002	
Scale 1:1 and 1:4	Plan measurements in mm, wood etc. in inches

'BAT OUT OF HELL'

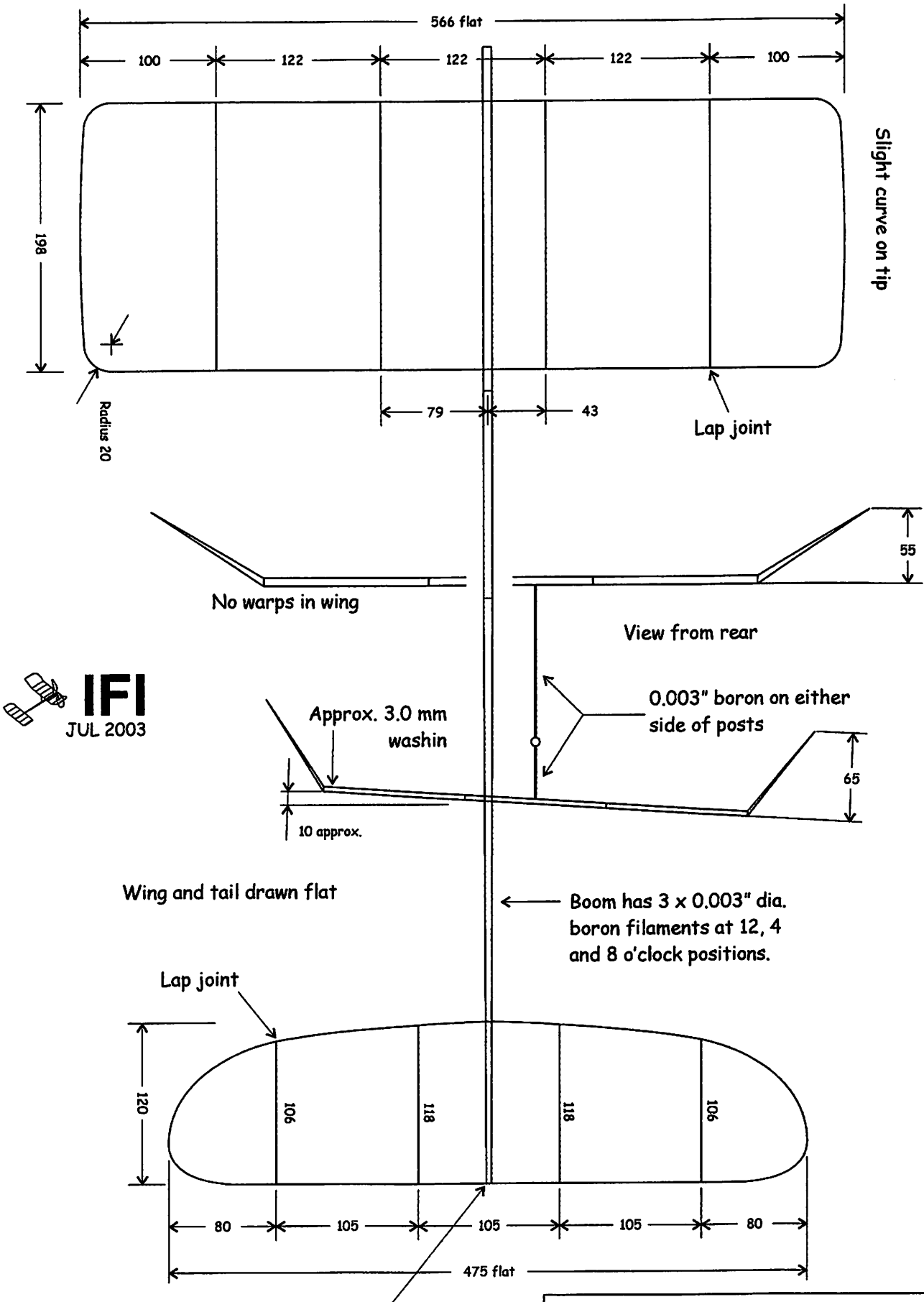
The model shown on the plan is actually a combination of the second and third F1D's that I built in 2000, after a gap of 14 years.

At the 'CargoLifter' meeting last year, I spent the first day flying a droop boom model but climb pattern problems made me switch to this older, straight aeroplane. When I assembled the wing onto the posts, it was obvious that something had moved somewhere, so I quickly took off the wing and substituted wing three, which had not been flown at high torque before. With time running out on the second afternoon of the contest, there was only a chance for 1 half motor test flight before a full competition attempt. Everything seemed OK.

After a reasonable wind, I hooked up the motor and launched – the model took off like its namesake, with the wing distorting in a most alarming manner. This time however there were none of the 'staggers' that had plagued me on the previous day and as the torque dropped off, the climb evened out and the model kept on going, eventually setting the official record.

The model is conventional in design and detail and similar to aeroplanes flown in the UK by Ron Green, Geoffrey Lefever and Bob Bailey. The motorstick wood was probably too soft, needing 4 pieces of boron to provide adequate longitudinal stiffness. This did nothing to control the torsional stiffness, which, together with a floppy wing, gave such spectacular wash-in at launch. Newer straight and drooped models use stiffer stick wood, less stick boron and boron composite wing spars and ribs.

Nick Aikman. 12.03.03.

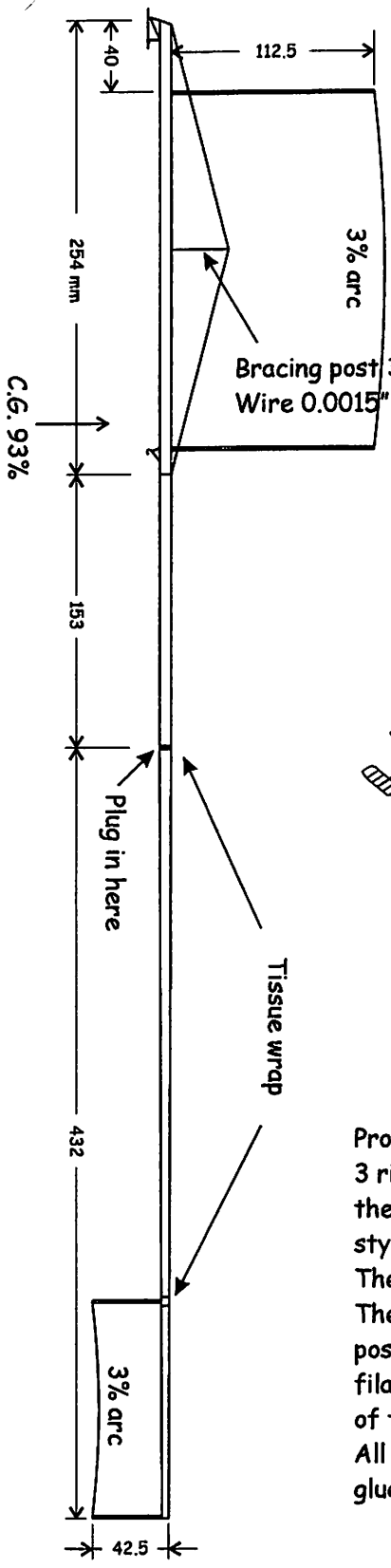


BAT OUT OF HELL!

A F1D model designed and drawn by Nick Aikman (UK)	Scale 1:4, details 1:1
	All measurements in.mm

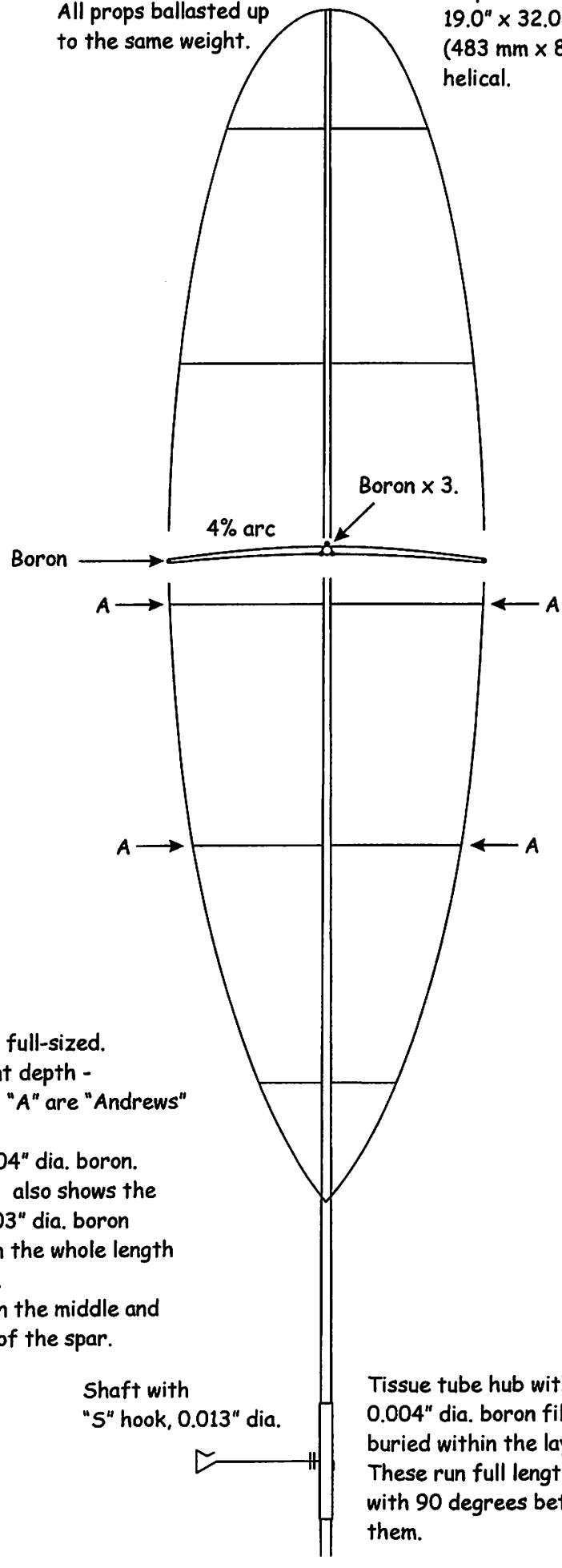
U.K. CAT. IV F1D Official Record Holder 36:32 at the CargoLifter Hanger, Germany 15th September 2002

Front & rear bearing / hook
are 0.013" dia. wire.
Approx. 2.5 degrees left thrust,
0 degrees down.



All props ballasted up
to the same weight.

Propeller
19.0" x 32.0"
(483 mm x 814 mm)
helical.



IFI
JUL 2003

Propellor is drawn full-sized.
3 ribs are constant depth -
the middle ribs at "A" are "Andrews"
style.
The outline is 0.004" dia. boron.
The cross-section also shows the
position of 3 0.003" dia. boron
filaments that run the whole length
of the round spar.
All ribs are split in the middle and
glued either side of the spar.

Shaft with
"S" hook, 0.013" dia.

Tissue tube hub with 4
0.004" dia. boron filaments
buried within the layers.
These run full length,
with 90 degrees between
them.

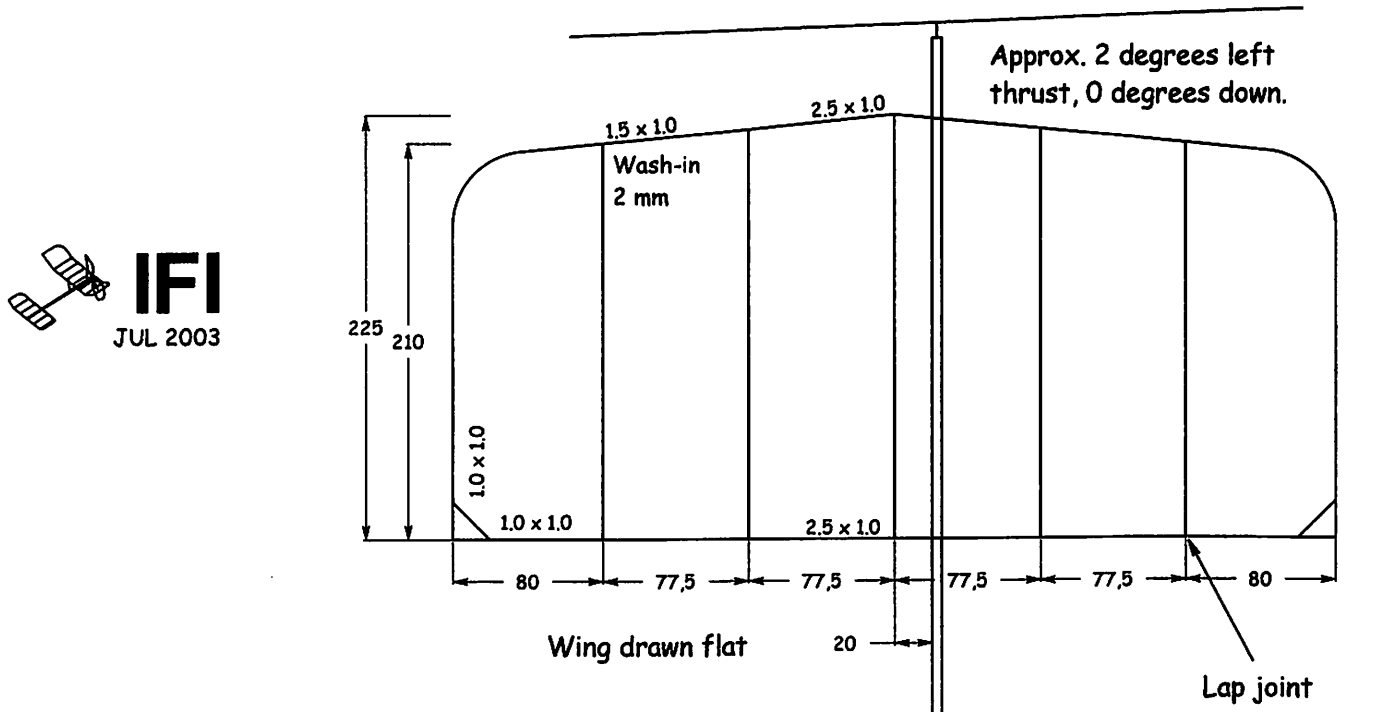
BAT OUT OF HELL!

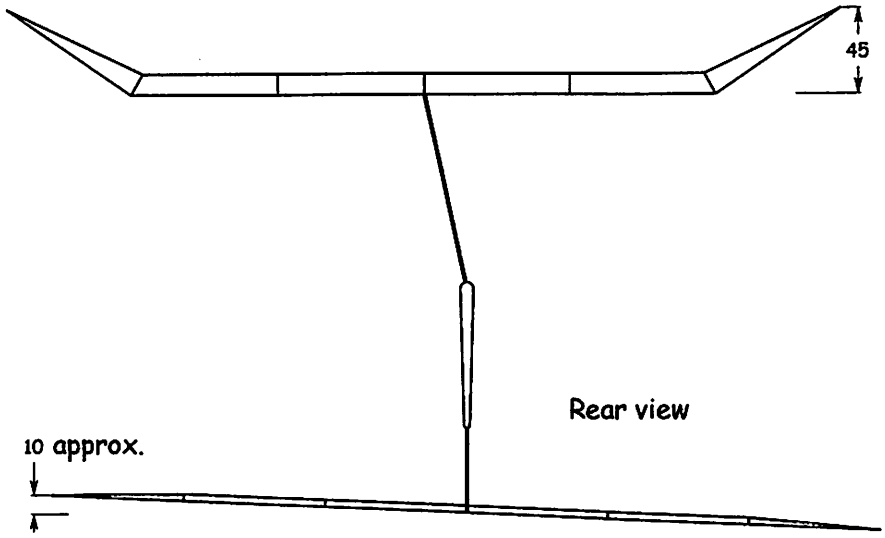
Page 2 of 2

A F1D model designed and drawn by Nick Aikman (UK)	Scale 1:4, details 1:1
	All measurements in mm

U.K. CAT. IV F1D Official Record Holder 36:32 at the CargoLifter Hanger, Germany 15th September 2002

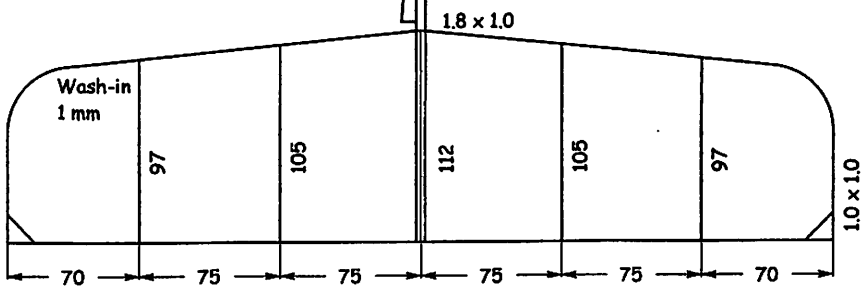
IFI
JUL 2003





For flight, the tailboom is temporarily glued to the stub boom with a drop of glue which is later dissolved to take boom and stick apart.

Fin offset approx. 4 mm to provide left turn.



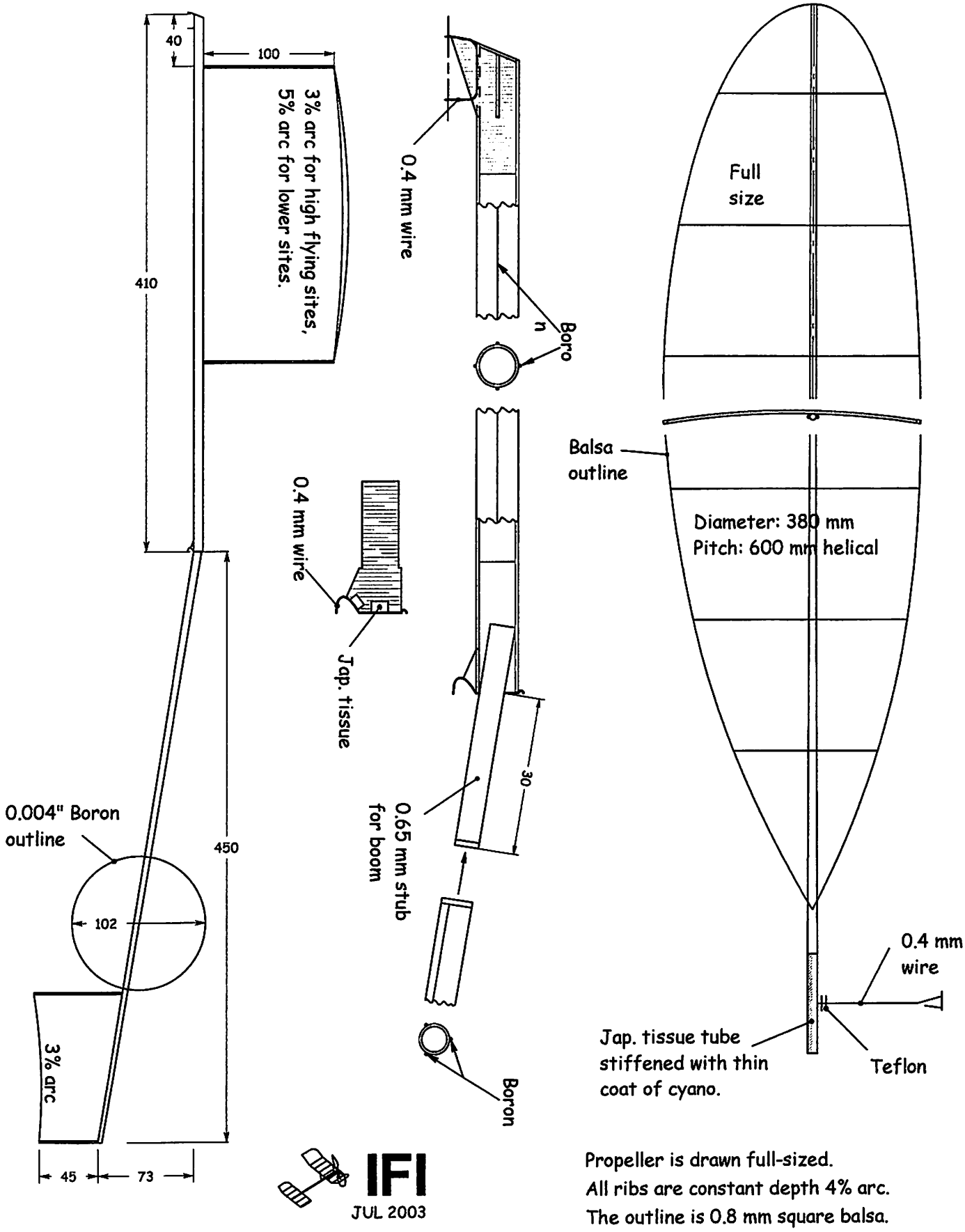
Weights	
Wing	0.60
Stabiliser	0.36
Motorstick + Posts	0.85
Boom + Posts	0.70
Propeller	0.37
Ballast	0.12
Total	3.00

F1M Model

A F1M Model designed by Gert Brendel (NL)

Scale 1:4, Details 1:1

All measurements in mm



IFI

JUL 2003

Propeller is drawn full-sized.
All ribs are constant depth 4% arc.
The outline is 0.8 mm square balsa.
The cross section of the spar shows
position of 2 0.003" dia boron filaments
that run the whole length of the round spar.
The ribs are glued on top of the spar.

F1M Model

A F1M Model designed by Gert Brendel (NL)	Scale 1:4, Details 1:1
	All measurements in mm

F1M by Gert Brendel

Component	Subcomponent	Details
Wing	Spars	2.5 x 1.0 mm → 1.5 x 1.0 mm + 2 x 0.004" boron
	Tips	1.5 x 1.0 mm → 1.0 x 1.0 mm
	Ribs	Andrews 1.0 x 1.0 mm → 2.0 x 1.0 mm → 1.0 x 1.0 mm
Stabiliser	Spars	1.8 x 1.0 mm → 1.5 x 1.0 mm
	Tips	1.5 x 1.0 mm → 1.0 x 1.0 mm
	Ribs	Andrews 1.0 x 0.8 mm → 1.5 x 0.8 mm → 1.0 x 0.8 mm
Motorstick		7.5 mm dia. 0.6 mm x 410 mm long – 0.107 g/cm^3 C-grain + 4 x 0.004" boron
Plug-in for boom		Trim to fit boom taper; thickness 0.6 mm
Boom		6 → 3 conical; 0.5 mm x 455 mm long – 0.104 g/cm^3 C-grain + 3 x 0.004" boron
Wingposts		1 x 2 mm oval section +2 x 0.004" boron
Tailposts		1 x 2 mm oval section + 2 x 0.004" boron
Propeller	Spar	2.0 mm dia. → 0.8 mm dia.
	Ribs	0.8 x 0.8 mm
Covering		Polymicro, attached with diluted Bison

F1M Model details

This is my latest F1M design, and it is based on Werner Nimptsch' model which was featured in IFI #56.

The motorstick and tailboom have boron on them to provide longitudinal stiffness. The motorstick has 4 pieces of 0.004" boron filaments (90 degrees apart – see the drawing), the boom has 3 (120 degrees apart). This way, there was no need for any bracing wires on the stick. Boron was glued on the fuselage in the way described on http://www.indoorduration.com/ftp/boronjigtg.pdf

With the prop shown, the model came out underweight. Since then, I've made a vp prop that came out at 0.5 gram, making the model a bit overweight. Using half motors and this vp prop in test flights in a gym hall with a smooth ceiling at 5.5 metre height, times of 5:30 minutes were flown (no full motor flights have yet been made). Tweaking the vp mechanism to get more performance from the model seems possible; during these testflights more than 25% of the initial turns were left in the rubber motor when the model landed.

F1M by Gert Brendel	
Best time till now: 10:04 during Indoor Fly In in Jan Massinkhal, April 2003 (fixed pitch prop).	
Scale 1:1 and 1:4	All measurements in mm.

Pitch Gauge for Indoor Props

(I'm not sure who originated the design for this pitch gauge, and I would be most pleased to acknowledge its designer. I've seen it in various configurations at indoor meets over the last decade. If you know its origins I would be pleased to give credit to the designer).

There are several significant advantages to the design of this pitch gauge:

- it is easily carried in your tool-box for on-site use;
- it is *very* useful in that role;
- it is simple and convenient to use;
- it can be used to quickly compare blade angles for each blade of the prop;
- it can be used (with a simply made rule) to determine the propeller pitch in inches.

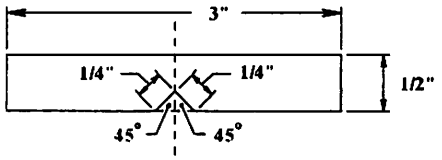
Materials Required

1 – 12" length of 1/4" sq. brass tube;
1 - 12" length of 7/32" sq. brass tube (K&S);
1 - piece of sheet brass 1/2" x 3" x 1/32" (K&S sheet);
1 - length of 0.020" music wire;
1 - 4-40 screw, 1/4" long;
1 - 4-40 nut;
1 - pc of stiff card stock, about 1" x 10";
Stay-brite silver solder.

Cut the 1/4" sq. tubing to a length of 5 1/2", drill a clearance hole for the 4-40 locking screw about 1 3/4" from one end of the tube. A 1/8" hole will provide some leeway when locating the 4-40 nut. Solder the nut over this hole, taking care to centre it, and using a minimum amount of solder. I used Stay-brite solder for my assembly.

Find, or cut to length, a 4-40 screw, 1/4" long and thread it into the nut, ensuring that it fits through the hole.

Cut a 3" length of 1/32" x 1/2" (K&S) brass sheet. Mark and cut a 90° notch on one side of this plate to fit the ¼" square tube. Ensure that the notch is as precise as you can make it, and that it is not tilted. The 45° angles are important to the accuracy of this gauge. I used a jeweller's saw frame with a fine blade for all of the metal cutting operations on this project.



Solder the brass plate to the 1/4" tube 2 inches from the end opposite the set-screw, as shown on the drawing, ensuring that it is at right angles to the tube. Use any system of clamping that comes to hand to ensure that the plate doesn't shift during the soldering process.

Cut off a 5/8" length of the 1/4" brass tube. Cut out a recess 7/32" long on one side to accommodate the 7/32" tube. Trim with a fine file to ensure a good fit. If you find this difficult to do, make the same cut in two opposing sides. Solder this piece to one end of the 7/32" tube. Ensure that it is at 90° to the tube.

Make two very fine nicks across the top of the 5/8" tube to accommodate the prop shaft. Ensure that these nicks are in line end at right angles to the length of the 10" long tube. I made these nicks using a jewellers saw with a fine blade held at a 45° angle. Although a sharp small file can be used, most files have a slightly rounded, or "safe" edge.

Make a prop shaft retainer from 0.020" music wire as shown, and solder the extreme ends to the 5/8" tube. Two things will be found to be helpful:

a. Recess the top edges of the tube (the edges *without* the nicks) by a small amount - the equivalent of the prop shaft diameter. This will assist the spring in putting pressure on the prop shaft when in use, and

b. Bend the music wire prop shaft retainer spring to a sharper angle than 90° and clamp it in position during soldering (above the soldering area) so that it exerts pressure on the top of the tube when the soldering is completed. Confine the solder to the extreme ends of the retainer.

Pitch Determination

As shown, the pitch checker provides a ready means of comparing propeller blade angles for the usual indoor props. With the addition of a simple "pitch rule" the device can also be used to determine the propeller pitch of each blade in inches of pitch. This is useful for re-setting prop pitches on-site. The rule can be made from a piece of stiff card stock, about 1/32" thick. My rule looks something like this (not to scale):



In use, the rule is held against the inside of the vertical tube, and the pitch is read at the point on the rule coincident with the cross-plate.

The pitch checker is based upon the fact that the pitch of any propeller = 2 pi r tan theta, where "'r" is the radius at which the prop is measured. Since we have set the movable measuring cross-plate to 45° and the tangent of 45° is 1, then the pitch formula reduces to:

$$\text{Pitch} = 2 * \pi * r$$

The radius therefore for any pitch:

$$r = \text{pitch} / 2*\pi$$

To construct your rule, take a piece of card stock (oversize), draw a horizontal line on it about 10 inches long and draw a vertical line about 3 inches from the left end. This mark will represent the prop shaft notch point, i.e. zero radius, and is the reference point for all subsequent measurements.

For simplicity of use you should decide at the outset whether you prefer to place the end of the rule against the inside of the vertical tube (as I do), or to hold the rule on the end of the device. Either way is OK, but you *must* take into account the 1/8" difference when making your rule. If you wish to place the end of the rule against the inside of the vertical tube you need to cut off 1/8" to the *right* of zero after *all* your calculations have been made and the pitches marked on the rule.

If you opt to put a hook on the end of your rule then this hook should be 1/8" *to the left* of the zero reference radius point.

Calculations and Rule Marking

Start with the lowest pitch that you are likely to use (say 12") and calculate the radii for the range of pitches you wish to cover (say to 44"). On a sheet of paper list the pitches, and calculate the distance from the reference point for each of these pitches. Thus for a 12" pitch, $r = 12 / 2*\pi = 1.90$". Draw a short vertical mark on the edge of the rule 1.90" from the reference point. A 6" vernier calliper is handy for setting these measurements.

Similarly, for a 14" pitch we calculate $r = 14 / 2*\pi = 2.22$". Measure 2.22" from the reference point and make your second mark. Continue the process for your desired pitch range. Having completed your pitch rule, you can cut it to size to suit the placement of the end (hook or inside) that you prefer.

(SAM 86 speaks editor's notes: If you have any questions, write, phone or E-mail me and I will endeavour to answer them. I had originally thought to draw up, and print the rule in this newsletter, but I decided against the idea because of the dimensional errors which are introduced in photocopying as well as those which occur when paper is cemented to card stock).

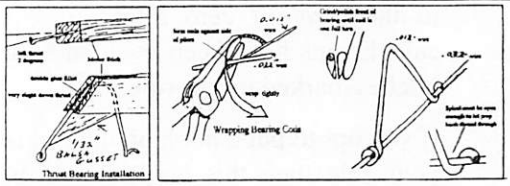
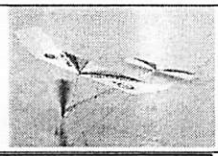
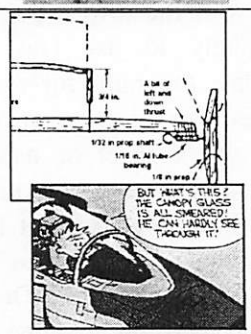
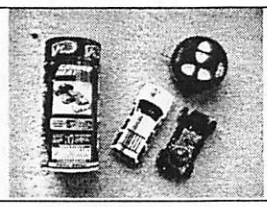
The best of S.L.I.M. available now!

Editor Carl Bakay

Over 80 pages of plans, tables, photos, and timely articles. Includes the best of the first 15 issues of this great journal from the Bayous of South Louisiana, in the original laserjet color, under one handy cover. Also included is an Appendix with 4 current indoor supply catalogs. Send $15.00 to:

Carl Bakay,
1621 Lake Salvador Drive,
Harvey,
LA 70058-5151,
USA

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	CHAPTER III	**MINISTICK & A-6 PLANS** Clarence Mather's A-6 PFFT A-6 - Jeff Dunlop Slugger A-6 – Andy Tagliafico International A-6 – John Lenderman MiniStick – Stan Chilton Poonker MiniStick – Rob Romash **Calvin & Hobbs** The real and imagined aviation adventures of these two are interspersed throughout the issue.
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Editorial

Dear readers, the last 1,5 pages of this issue of IFI were originally intended to start an article on stiffness testing of balsa wood, but I thought that the latest news about the European Championships F1D was of more importance. Therefor, the article about stiffness testing will have to wait till the next issue. My apologies about the incorrect info about the Eurochamps F1D on pages 4, 5 and 6, but these pages were already photocopied before the printshop closed during the summer holidays. The only way to give up-to-date info on the Eurochamps was to change the content on page 20.

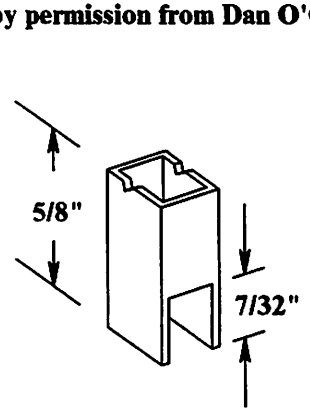
For the European readers, I have good news about subscription payment methods. Since July of this year, citizens of the European Union don't have to pay a fee anymore for transferring money between banks in different countries in the E.U. So, you can now pay by bank transfer if you live in the E.U. For the transaction to be free of charge, you need two code numbers: an *International Bank Account Number* (IBAN), and a *Bank Identifier Code* (BIC). For my account at the Postbank, these numbers are given in the colophon on page 2.

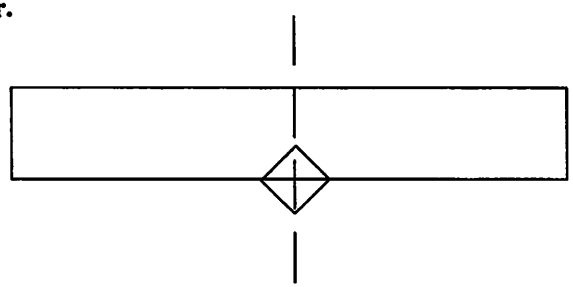
I wish you happy reading with this issue, and I hope to see you at the European Championships!

PITCH GAUGE

Reprinted from March '98 "SAM86 speaks"

by permission from Dan O'Grady, editor.







HOLE FOR SET SCREW: (4-40)
Drill hole slightly larger than thread diameter of set screw. Solder nut for set screw over hole using minimal amount of solder

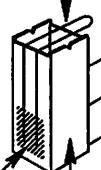
BRASS TUBE:
7/32" sq. x 10" long

BRASS TUBE:
1/4" sq. x 5 1/2" long



SPRING:
Made from 0.020" Piano Wire. Attach to tubing post w/ silver solder.

see detail



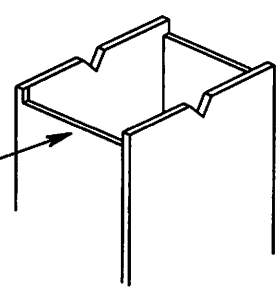
Silver solder lower ends of music wire spring

5/8" piece of 1/4" tubing. Cut out 7/32" section of one side to straddle 7/32" tube. Solder to tube.

BRASS PLATE:
3" x 1/2" x 1/32" thick
Cut 45° notch in plate and solder to 1/4" tube @ precisely 90°



IFI
JUL 2003



Note: edges opposite notches are relieved slightly to ensure good spring pressure

Results Midwintercontest 2003

University of Twente, March 9th 2003, The Netherlands

F1M

	Name	Fl. 1	Fl. 2	Fl. 3	Fl. 4	Fl. 5	Fl. 6	Best Fl.	2nd Best Fl.	Total
1	Hubert Meulman	710	736	666				736	710	1446
2	Gert Brendel	570	608	610	617			617	610	1227
3	Erik Crins	611	587					611	587	1198
4	Noud Gademan	475	560	434	484			560	484	1044
5	Matthijs van Hulst	462	450	420				462	450	912
6	Bernard Bruins	176	350	360	385	338		385	360	745

F1M Small

	Name	Fl. 1	Fl. 2	Fl. 3	Fl. 4	Fl. 5	Fl. 6	Best Fl.	2nd Best Fl.	Total
1	Kevin Lamers	132	380	289	336			380	336	716
2	Marijn Zwier	225	243	246	234	301		301	246	547

(F)Looper

	Name	Fl. 1	Fl. 2	Fl. 3	Fl. 4	Fl. 5	Fl. 6	Best Fl.	2nd Best Fl.	Total
1	Laurie Wevers	33	66	26	98	83	84	98	84	182
2	Thomas Gebauer	85	86	83	80	82	82	86	85	171
3	Stephan Tenkleve	72	80	75	79	77	81	81	80	161
4	Joris Maassen	33	39	66	69	79	81	81	79	160
5	Teun Oude Wolbers	64	68	72	72	75	78	78	75	153
6	Markus Soick	73	74	78	74	74		78	74	152
7	Patrick Dlugosch	74	66	74	74	74	74	74	74	148
8	Robert Rode	73	66	69	60	66	67	73	69	142
9	Alain van der Kaap	59	77	64				77	64	141
10	Niels Oude Wolbers	31	50	60	71	69	68	71	69	140
11	Vincent van Bameveld	40	50	62	60	61	76	76	62	138
12	Jonas Hülsmann	70	67					70	67	137
13	Tim Greve	63	71	21				71	63	134
14	Yury de Jong	34	65	52	3	67	64	67	65	132
15	Christian Tenkleve	44	41	63	58			63	58	121
16	Erik Akkersdijk	29	31	39	49	66	15	66	49	115
17	Twan Stevens	46	51	59				59	51	110
18	Stijn Visser	44	55	46	39	38	46	55	46	101
19	Ywan de Jong	49	46	34				49	46	95
20	Mike Schulte	43						43		43

Profile Scale/Bostonian

	Name	Fl. 1	Fl. 2	Fl. 3	Fl. 4	Fl. 5	Fl. 6	Best Fl.	2nd Best Fl.	Total
1	Marijn Zwier	46	56	70				70	56	126
2	Teun Oude Wolbers	51	42	51	47	48		51	51	102
3	Joris Maassen	13	37	38	34			38	37	75
4	Laurie Wevers	23	13	45				45	23	68
5	Niels Oude Wolbers	23	28	32				32	28	60

Indoor HLG

	Name	Fl. 1	Fl. 2	Fl. 3	Fl. 4	Fl. 5	Fl. 6	Best Fl.	2nd Best Fl.	Total
1	Erik Akkersdijk	10	11	12	11	11	11	12	11	23
2	Damian Bergsma	12	10	10	11	10	11	12	11	23

Indoor CLG (model called Zweefkat)

	Name	Fl. 1	Fl. 2	Fl. 3	Fl. 4	Fl. 5	Fl. 6	Best Fl.	2nd Best Fl.	Total
1	Laurie Wevers	12	11	12	11			12	12	24
2	Marijn Zwier	11	10	10	10	9		11	10	21
3	Niels Oude Wolbers	5	8	8	7			8	8	16

Scale

	Name	Static	Flight	Total
1	Thedo Andre	33	37	70
2	Erik Crins	28	37	65
3	Matthijs van Hulst	27	37	64
4	Marijn Zwier	31	32	63

Results Dutch National Indoor Fly In 2003

April 21st 2003 - Jan Massinkhal, Nijmegen, The Netherlands

F1M Senior

	Name	1	2	3	4	5	6	Total best 2
1	Erik Crins	09:10	09:49	10:14	10:30			20:44
2	Maarten Blasse	09:04	09:23	01:12	10:15			19:38
3	Gert Brendel	04:09	09:34	10:04	07:49			19:38

F1M Junior

	Name	1	2	3	4	5	6	Total best 2
1	Bernard Bruins	06:15	06:45	06:35	07:03	07:27		14:30
2	Kevin Lamers	05:57	05:43	06:30	06:36	07:03		13:39
3	Niels Wijnhoven	02:54	03:36	03:44	03:47	02:04	04:28	08:15

(F)Looper

	Name	1	2	3	4	5	6	Total best 2
1	Niels Wijnhoven	01:28	01:25	01:31	01:38	01:03	01:33	03:11
2	Michiel Degen	01:06	01:07	01:19	01:10	01:31	01:20	02:51
3	Stan Spruytenberg	00:08	00:45	01:02	00:58	00:53	00:58	02:00

Indoor HLG

	Name	1	2	3	4	5	6	Total best 2
1	Gert Brendel	28	12	24	26	9	28	56
2	Jurgen Maassen	21,3	19,1	19,3	19,8	22,1	19,2	43,4
3	Erik Crins	14,9	21,1	17,1	20,2	14,7	16,0	41,3
4	Erik Akkersdijk	10,3	4,9	8,7	11,0	12,5	10,5	23,5
5	Niels Wijnhoven	3,9	4,3	4,8	7,7	5,7	3,1	13,3
6	Stan Spruytenberg	7,3	7,3	8,0	4,3	5,3		15,3

Scale

	Name	Model Name	Static	Fl.	Total
1	Thedo André	Zlin Z137T	78	50	128
2	Eric Crins	P-39 Airacobra	56	48	104
3	Gerrit de Kruijff	Renard R33	59	35	94
4	Michiel Degen	Fokker EIII	30	50	80
5	Hogard Janssen	Piper Cub	38	8	46

Results Bordeaux International 2003

F1M Beginner

	Name, First Name	Country	Best Fl.	2nd. Best Fl.	Total
1	Ducassou François	France	16:47	16:30	0:33:17
2	Green Mike	UK	16:50	16:14	0:33:04
3	Lefever Geoffrey	UK	16:23	15:54	0:32:17
4	Medina Daniel	Spain	14:58	14:58	0:29:56
5	Carles Maurice	France	14:55	14:48	0:29:43
6	Hua-Ngoc Trung	France	14:44	14:44	0:29:28
7	Roch Edmond	France	13:28	13:05	0:26:33
8	Champion Robert	France	13:06	12:54	0:26:00
9	Neraudeau Francis	France	13:02	12:05	0:25:07
10	Stichbury Bryan	UK	13:38	10:54	0:24:32
11	Jones Geoffrey	UK	14:31	8:52	0:23:23
12	Denaud Dany	France	10:11	9:42	0:19:53
13	Delcroix Jacques	France	9:33	9:13	0:18:46
14	Pailhé Pierre	France	9:57	8:40	0:18:37
15	Darrouzès J.Pierre	France	8:32	7:38	0:16:10
16	Dao Jo	France	0:00	0:00	0:00:00

F1L EZB (1.2g)

	Name, First Name	Country	Best Fl.	2nd. Best Fl.	Total
1	Bailey Bob	UK	22:22	21:29	43:51
2	Medina Mangas Daniel	Spain	22:34	20:48	43:22
3	Jones Geoffrey	UK	20:21	19:49	40:10
4	Lefever Geoffrey	UK	19:59	18:38	38:37
5	Diaz Manuel Angel	Spain	19:26	17:28	36:54
6	Roch Edmond	France	17:47	17:16	35:03
7	Frugoli Jean Francis	France	17:37	17:00	34:37
8	Ducassou François	France	17:28	16:48	34:16
9	Green Mike	UK	16:37	16:35	33:12
10	Carles Maurice	France	15:13	15:04	30:17
11	Grange Yannick	France	14:42	14:39	29:21
12	Delcroix Jacques	France	14:05	13:20	27:25
13	Sorese Laurent	France	15:11	11:46	26:57
14	HUA NGOC Trung	France	13:01	12:43	25:44
15	Prevault Jean Marc	France	15:27	10:00	25:27
16	Stichbury Bryan	UK	12:09	9:56	22:05
17	Pourias Fabien	France	10:01	9:20	19:21
18	Moriceau Bertrand	France	10:16	8:50	19:06
19	Denaud Dany	France	6:22	6:22	12:44
20	MontJean Etienne	France	4:32	4:05	08:37
21	Vilmus Maxime	France	3:30	1:43	05:13
22	Canizzo Pierre	France	4:24	0:00	04:24
23	Gensollen Thibaut	France	3:35	0:00	03:35

Micro 35 Sénior

	Name, First Name	Country	Best Fl.	2nd. Best Fl.	Total
1	Bailey Bob	UK	32:21	29:24	1:01:45
2	Roch Edmond	France	22:29	21:40	0:44:09
3	Croguennec Vincent	France	22:29	20:17	0:42:46
4	Frugoli Francis	France	21:16	19:26	0:40:42
5	King Clive	UK	17:40	15:44	0:33:24
6	Champion Robert	France	16:52	14:58	0:31:50
7	Dao Jo	France	14:35	13:57	0:28:32
8	Pourias Fabien	France	15:35	12:56	0:28:31
9	Green Mike	UK	15:04	11:58	0:27:02
10	Sorese Laurent	France	14:05	12:10	0:26:15
11	Delcroix Jacques	France	12:38	11:08	0:23:46
12	Moriceau Bertrand	France	10:45	10:28	0:21:13
13	Fortage Bruno	France	10:35	10:27	0:21:02
14	Marilier Thierry	France	10:53	9:18	0:20:11
15	Pailhé Pierre	France	9:30	9:15	0:18:45
16	Coffin Pierre-Yves	France	8:55	8:47	0:17:42
17	Lefever	UK	15:18	0:00	0:15:18
18	Néraudeau Francis	France	6:54	6:47	0:13:41
19	Denaud Dany	France	6:45	6:26	0:13:11
20	Prevault Jean-Marc	France	6:50	5:34	0:12:24
21	Touzé Mathieu	France	6:04	5:58	0:12:02
22	Roy Richard	France	6:09	5:50	0:11:59
23	Marchand Gabriel	France	5:14	4:53	0:10:07
24	Bluck Alain	France	5:05	4:54	0:09:59
25	Fritz Maurice	France	3:40	3:20	0:07:00

F1D (55cm – 1.2g)

	Name, First Name	Country	Best Fl.	2nd. Best Fl.	Total
1	Bailey Bob	UK	31:27	30:08	1:01:35
2	Médina Daniel	Spain	28:50	27:51	0:56:41
3	Diaz Manuel Angel	Spain	28:23	28:08	0:56:31
4	Lefever Geoffrey	UK	24:41	24:15	0:48:56
5	Barberis Didier	France	24:02	22:06	0:46:08
6	Champion Robert	France	23:30	22:22	0:45:52
7	Frugoli Jean Francis	France	23:28	21:10	0:44:38
8	Marilier Thierry	France	16:54	16:46	0:33:40
9	Dao Jo	France	14:18	13:40	0:27:58
10	Pailhé Pierre	France	13:16	12:36	0:25:52

Tiny Rubber Models Postal Rules

Hosted by Ramon K. Katigbak

Final Rules for the TINY RUBBER MODELS POSTAL or TRUMP:

Outdoor Division has three wingspan classes: 10", 8" and 6". Each wingspan class is in turn divided into three structural classes: Cabin (meaning any three-dimensional fuselage, triangular included), Profile (meaning no-cal type) and Stick (meaning stick).

Indoor Division has two wingspan classes: Housefly or 6" max (sample plan from Alejandro Garcia's site at *www.elale.net/Aero/FreeFlight.htm*) and Matchbox or 3" max (sample plans from Dannysoar's site at *home.att.net/~mybeasts/matchbox.htm*). No other rules.

All wingspans are projected. Scoring by making five consecutive flights and throwing out best and worst. The best single flight will also be recognized (I'm curious about the maximum performance potential of these little beasts).

Contest will end on my usual favorite date, Philippine-American Friendship Day or July 4, 2004.

I've started an egroup at *groups.yahoo.com/group/rkktrump/* with email address *rkktrump@yahoogroups.com* and invited everyone who expressed interest in the postal; you can join by going direct or just letting me know. You are invited to post photos, plans, files or whatever to this group.

Entries may be posted to the egroup, to me directly or to the FFML, SimpleFlyers or Indoor groups.

Regards, Jun

European Championships F1D in CargoLifter Hangar cancelled!!...

Taken from http://www.thermiksense.de and translated into English by the editor

The Indoor European F1D Championships and all other Indoor Meetings that were scheduled in the CargoLifter Hangar in Brand, Germany, in 2003 are **cancelled**.

The Hangar isn't in use anymore and it is now without water, electricity and without insurance. Therefor, we needed to cancel all upcoming contests and meetings that were scheduled in the CargoLifter Hangar.

http://www.thermiksense.de
20th .July 2003

But there will be a European Championships in F1D!!!

Provisional details of European Championships F1D in the Millennium Dome in the U.K.

By Laurie Barr, FSMAE, U.K.

Dear All,

I can confirm my offer to stage the Eurochamps in London on the 3/4/5th of October 2003.

The Dome is 50 metres high inside and has 80,000 sq metres floor area.

We will provide all staff to run this event (this means there is need of volunteers to do timekeeping and/or other duties - concessions on cost are given in return!). We would like Gerhard Woebbeking to be the Contest director. We will provide all equipment/books etc to run the event.
We want the same Jury as previously selected, but I want to know as soon as possible what the lowest cost to my budget to get Gerhard and the Jury to London.

I need Gerhard to contact all Aeroclubs about the new venue, and I need to know quickly as possible which teams will come to London, and how many people will pay the Euro200 entry fee, so I will know what is the income for my budget. All future contacts about this meeting is to be through myself, at *lgbarr@tiscali.co.uk* or by tel (0)1628 487544.

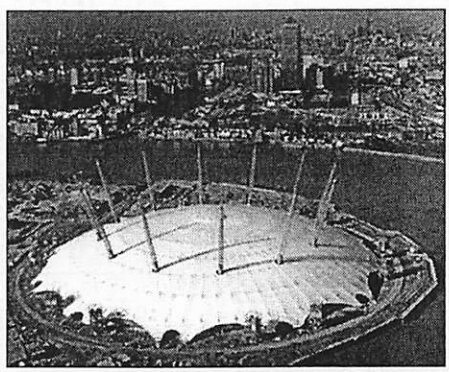
The Dome has the North Greenwich Underground Station (Jubilee Line), right next to the Dome.

The recommended Hotel * is short walk away.

You can get to the Dome, as follows.--

London Airport, and Underground train. Change at Green Park from the Piccadilly Line on to the Jubilee Line and exit at North Greenwich Station (I will provide Underground maps and a site map, showing the Dome, the Station, and the Hotel).

Eurostar trains from Paris & Bruxelles arrive at Waterloo Station and you can take the Jubilee Line Underground train to arrive outside the Dome.



The millennium Dome in London

To come by road you can use various Car Ferry's; the nearest Port is Dover. You can drive from Dover on the M20 Motorway until it reaches Swanley interchange where it crosses the M 25. Take the A2 Road to Lewishham which runs into the A102 road, arriving next to the Dome. Just before you reach the Dome and the Blackwall Tunnel (under the Thames River!), look out for a BRIGHT BLUE OVERHEAD pedestrian Bridge. You MUST take the next exit to get to the Dome.

The recommended Hotel * is the Express By Holiday Inn. It is a short walk to the Dome. This Hotel has many 2 bedded rooms which can also be increased to 3 or 4 beds, using a Sofabed (Fold out bed). The cost per room is £75 (Euro 112 approx) including a Continental Breakfast. If 4 people share the room, the cost is only Euro 28.125 each!

You MUST MAKE YOUR OWN arrangements and do it soon, while space is still available! Contact Craig Penry on 0208 269 5054. Mention BMFA/Dome/Laurie Barr to get this special rate or e-Mail them at *www.hiexpress.co.uk.*

An alternative Hotel is Travel Inns, who have rooms (for 2 persons only) at £49.95 (Euro 75 approx). You have to contact their web site at *www.travelinn.co.uk* and ask them for the nearest Hotel and best method of travelling to the dome.

Food will be provided in the Dome, during the daytime. I also hope to have the Banquet in the Dome. Details to follow.

I also hope to hold an open invitational set of contests for F1D/F1M/F1L, Hand launched and catapult Glider and some Indoor Scale (Peanut etc).

The Open International will have to give priority of Air Space to the Eurochamps, but this is a very large hall and it should be a once in a life time meeting for all indoor enthusiasts.

There is only 9 weeks to go!! for all this will happen; so please tell me as quickly as possible if you are coming.

Good Luck!

Laurie Barr
BMFA/ FSMAE
22nd July 2003