Diary

5th December Henlow	Aeromodeller Coupe d'Hiver International. F1G and 100 g. Prior notification required for admission at the gate. Contact A/M, tel: 0442 41221.
12th December Wigan College of Technology	Wigan Indoor meeting. EZB; HLG; Keyhole scale. Contact, D Yates, tel: 0942 214725. A second meeting will be held on 13th February 1983.

NOVEMBER 1982 82/11

FFn

FREE FLIGHT NEWS

Contents

Editorial	82
Obituary	82
Proposals for FAI rule changes	82
British team trials - 1983 World Champs	84
... results, F1A and F1B	85
... results, F1C	86
Snippets on the World Champs	86
Noticeboard	86

8 Blenheim Court, Farnborough, Hants, England GU14 7DS

Compiled and published by Ian Kaynes, Paul Masterman, Malcolm Wood.

EDITORIAL

Readers will be aware that we sent two issues in one envelope last month, as part of a 'catch up' operation. However, we forgot to dateline the second copy, which should have been identified 'October 1982, (82/10)'. Sorry about that!

This edition contains no drawings. Malcolm has been particularly busy at work and had been called away from home to meetings in Scotland, so restricting the output of graphic material. The need to get this edition out, in order to inform readers of proposals for changes to the rules in FAI free flight classes takes precedence over drawings this month.

OBITUARY

We are sorry to have to report the death of the well-known US flyer Tom Hutchinson. Tom was perhaps best known for his glider flying and for the development of his 'Dragmaster' which was kitted both in Japan and also by his own enterprise which he and his wife ran. In recent years, Tom furnished an interesting column in 'Model Builder' magazine - on free flight, what else? He will be missed both by those who had the pleasure of knowing him personally and by his followers in the league of kits and commentary.

PROPOSALS FOR F.A.I. RULE CHANGES

The following are items of free flight interest from the agenda for the 1982 C.I.A.M. Plenary meeting, to be held in Paris on December 2nd and 3rd. The proposals are given in the order used in the agenda, with the name of the country making the proposal and the reasons quoted by the proposing country.

1. FRANCE Throughout the Sporting Code the term "World Championships" should be replaced by "World and Continental Championships".
Reason : The rules for World Championships are currently applied to continental championships by default.

2. FRANCE Organisation of open internationals. During the first period, the time to fly will be left to the contestants. During the second period, the time to fly will be enforced by the timekeepers according to a draw which will establish the obligatory flying order. From the moment the order to launch is given the contestant has 3 minutes to launch. The timekeepers must arrange that all contestants who have not yet made an attempt have at least 6 minutes available. (Note : This is a rough translation from the original French. Presumably it means that during a round the timekeepers would let the contestants choose their own flying time and order until it became apparent that there was only 6 minutes left for each of the competitors still waiting to fly in the round. At this stage the "second period" would be deemed to have started and the timekeepers would then enforce flying order with 3 minutes to fly plus 3 minutes flight time for each person.)

Reason : There is currently no restriction to prevent one contestant from monopolising the entire round.

3. DENMARK (para 2.3.5) The present world champion as well as the competitors placed second and third shall have the right (if approved by their National Aero Club) to participate in the next world championships independent of qualification for the national team. The three competitors shall start from the same pole.

4. BELGIUM Define EZB models in para 3.4.2 as follows .
The maximum wingspan is 45cm, maximum wing chord 7.5cm, maximum length of the motor stick is 23cm, minimum weight of the model without rubber motor is 1.2g. Flying surfaces shall be rectangular and no wire or wood bracing may be used. The covering of the surfaces will be anything except microfilm. A tubular fuselage is not allowed.

Reason : Interest in EZB in international open contests is growing while interest in the F1D Beginner formula is dropping.

5. DENMARK (para 2.6.1) Allow an unlimited number of models for classes F1A, F1B, F1C, F1G.
Reason : The motivation for reducing the number of models was outdated years ago.

6. USSR The USSR propose unlimited numbers of models in F1A, F1B, F1C.
Reason : The experience of running World and European Championships proves that 3 models are insufficient.

7. FRANCE (para 2.6.1) A competitor can present 4 models for processing but may only use 3 models during the competition. The fourth model may be used in the fly-off if desired.

Reason : A competitor may reach the fly-off with unsuitable models or an inadequate number of models.

8. FRANCE (para 2.6.6) Modify the practice of identifying models by letters A, B, or C on the FAI stickers to allow the competitor to mark the sticker with a single letter of his choice. The letter of the model used must be recorded on the flight card.

Reason : It is possible for a competitor to pretend to have lost a model marked A during a test flight and then to have a new model A processed, with nothing to distinguish between the 2 models.

9. FINLAND (para 2.9) All kinds of electronic thermal detection devices are forbidden at the penalty of disqualification.

Reason : Sophisticated and expensive equipment will distort the situation from a contest between competitors and models to a contest between electronics experts. High cost and availability will put some competitors at an unfair advantage.

10. AUSTRALIA (para 3.1.2) Replace the 2kg line test by 500g.
Reason : The 2Kg line is considered too severe on the nature of the model, the size of the model and the weight of the model.

11. CHINA (para 3.1.2) Reduce maximum length of launch cable to 40m.
Reason : To increase the flight difficulties; to reduce thermal influence; to ease the selection of contest site.

12. CHINA (para 3.1.11.a) Replace the phrase "except .. after towing" by "the maximum elongation of the towing cable shall not exceed 0.5m after towing. The cable and launching device shall be handed over to the timekeepers immediately after towing."

Reason : Although some plastic cable did not exceed the required length during the measurement of 2Kg pull test, the length of the cable will far exceed the required length if the competitor applies a force larger than 2Kg before launching.

13. USSR (para 3.1.2) Maximum length of launching cable loaded by 2Kg : 25m.
(para 3.1.3) Each competitor is entitled to 10 official flights. Duration of each round 45 minutes.
(para 3.1.8.a) The total time of the 10 flights of each competitor is taken for the final classification.
(para 3.1.9.a) The timing of flights is limited to a maximum of 2 minutes.

Reason : Experience proves that flights timed to a maximum of 3 minutes not always ensure safe landings due to the limited dimensions of flight areas; also it results sometimes in non-objective timing of flights.

14. USSR (para 3.2.2, Wakefield) Minimum weight of model less motor 210g
Maximum weight of motor lubricated 20g.

Reasons as for item 13.

15. USSR (para 3.3.2, Power) Minimum total weight 400g/cc
Minimum loading 27 g/sq dm
Maximum duration of motor run 5 seconds.

Reasons as for item 13.

16. CHINA (para 3.2.2) Reduce maximum weight of motors to 30g.
Reasons as for item 11.

17. CHINA (para 3.3.2, power) Reduce duration of motor run to 5 seconds.
Reasons as for item 11.

18. USSR (para 3.3.8.b, power) This is noted as a change specifically requested for the 1983 World Championships. The maximum time of motor run in each additional (fly-off) round should be reduced by 2 seconds, but no less than by 3 seconds as compared with the previous one. (Quoted)

Reason : The last years experience of running world and European championships proved that the increase of duration of the model's flight entails the impossibility of observing a complete flight even by means of optical devices.

19. AUSTRALIA (para 3.3.2) After "80% methanol 20% lubricant" add "The organisers shall require the blender of the fuel to submit a certificate of analysis, such certificate to be made available for inspection by any team manager on request".

Reason : To cover the organisers and competitors against any possible discrepancy of fuel supplied.

20. FINLAND (para 3.3.2) Characteristics of F1C models :
Maximum swept volume of motor 1.5cc
No extensions whatsoever are allowed to the exhaust opening(s) of the motor
Minimum total weight 450g
Surface area 32 to 34 sq dm
Maximum loading 50 g/sq dm
Maximum duration of motor run 10 seconds.

Reason : The present definition produces an extremely dangerous model and has considerably decreased interest in this class.

21. CIAM BUREAU. The CIAM Bureau insists that the free flight sub-committee seriously looks for a solution to reduce performance in F1C and takes a decision.

22. Although not strictly a free flight item, it is relevant to note that the CIAM control line subcommittee has proposed that control line speed, team race and combat classes should all have a maximum engine capacity of 1.5cc. The stated reasons are that this will reduce speeds to promote safety and in addition noise output will be reduced to acceptable levels.

Hopefully, this issue of FFn will reach you in time for comments to be made before the meeting in Paris - at least for readers in the UK. The correct route for comments in the UK is to the SMAE free flight technical committee, who are responsible for briefing the SMAE delegate to the FAI. In addition I (Ian Kaynes) would welcome your comments, to the FFn editorial address. As chairman of the CIAM free flight subcommittee this would help me in directing the course of discussions in the technical meeting in Paris. To put my views on the table, my brief comments on the proposals follow :

1. A beneficial tidying up of the references to different championships.

2. It may be a good idea to legislate for some such emergency action, but this wording needs improving at least. The rule should appear in the organisers guide rather than the Sporting Code.

3. This reflects continued concern about the unfairness of the defending champion having the advantage of a pole to himself. However, results have not yet demonstrated this to be a real advantage; also, there are no rules preventing a country from entering a 1 or 2 man team and gaining a similar advantage.

4. The FAI simple indoor model specification has not been taken up widely but if EZB is accepted as a replacement it should be listed in the provisional rules. This would be appropriate for a controversial rule, with doubts for example about the wing covering allowed.

5,6. Allowing an unlimited number of models would open up a gulf between the few "professional" modellers who can prepare lots of models to suit all conditions and the rest of us who compete with a few general purpose models and possibly one or two fly-off specials.

7. This seems a more practical way of allowing more model freedom but without the mass of paperwork or processing that would be needed for an unlimited number of models.

8. A sensible move from the competitor's point of view - a model can be marked with the same letter for its entire life - but it does not stop cheating of the type apparently worrying France.

9. Well ? I have some sympathy but detectors are now an inherent element.

10. This shows an incredible lack of appreciation of the unlatch tensions set on the average circle towhook.

12. It is the competitor's responsibility to ensure that his equipment, even a plastic line, meets the rules at all times.

13, 14, 15. If we really want to fly two minute maximums then the current F1G and F1H (CdH, A1) would seem to provide a ready made foundation for glider and rubber, and better than flying short length lines for

current F1A models or low power F1B. 20g rubber in a heavy F1B would certainly further separate Russian Wakes from the rest of the world. A heavier 2.5cc model cannot be the way to progress in improving F1C.

11, 16, 17. A more reasonable proposal for restricting performance within the framework of current rules and 3 minute max. Recent championships have not demonstrated F1A or F1B to have too much performance; perhaps these changes would be consistent with 2.30 maximums ? Reduced motor run is only suitable as a short term remedy in F1C.

18. If I understand this correctly, they want fly-off engine runs reduced to 5 and then 3 seconds. Given the troubles with trimming models for different runs, I would prefer to see a shorter run (5 or 6) seconds for all flights in order to cut down the number in the fly-off.

20, 21, 22. Last year I had attempted to introduce a rule change to allow smaller motors in large, light models alogside the current models. This was partly prompted by the knowledge that 1.5cc were possibly coming for control line and it would have given us the opportunity to drop maximum engine size to 1.5cc later when these became more commonly available. However, my ideas for a gradual change by this means were defeated because it was said that the large light models would have more performance than the 2.5cc current ships. It now seems likely that we will indeed have to drop engine size, but now we are without an easy way to make a smooth transition from current models. Cutting motor runs is OK in the interim but does emphasise the impossibility of timing runs under the current methods. Ideas for improving this and also achieving a slower, less dangerous model would be very welcome.

BRITISH TEAM TRIALS - 1983 WORLD CHAMPIONSHIPS

Barkston Heath, 18-19th September
Ouston, Albemarle Barracks, 23rd October

Preface: the report below is mainly concerned with the logistics of the event and some general remarks on flying trials in the British Isles, since the writer was contest director and saw relatively little of the true flying! However, a close analysis of the complete score sheets appended will, I hope, tell its own story as well as providing a record of the event - PSM.

Running the World Championships team trials during the autumn equinox has been the custom in the United Kingdom for very many years and has proved to be a hazardous experience. There is always the high probability of unstable weather patterns moving in from the Mid and North Atlantic. But to hold the contest earlier brings the event into the period when crops are still standing in the fields neighbouring the airfields, or, if the selection is held over, late dates bring short days. Leaving the contest until the Spring of the year of the Championships brings no better guarantee of weather and the complaint that the teams have too little time for preparation.

In 1982, the SMAE's free flight technical committee chose the formula as before: two weekends, one in September and the second in October with a total of fourteen rounds to be flown. They decided it would be best to leave the flying arrangements open until announced at the commencement of each day, so allowing the organisation to take full advantage of any fortuitous weather conditions. The sole constraint they imposed was to announce in advance the daily starting time. In spite of some misgivings, good fortune smiled on the contest, though both contest periods only squeaked through good weather windows by the skin of their teeth!

For flying sites, two airfields were obtained from a prospective lis of seventeen. The first weekend was held at Barkston; the second gave a number of people their first opportunity to fly north of Hadrian's Wall at Ouston, otherwise Albemarle Barracks. Those in the south expressed a certain amount of 'shock-horror' at the prospe of a 300 mile drive, but were told that beggars can't be choosers. No-one was heard to complain too loudly - probably because the faint hearted or the also-rans decided to quit early! Only in Wakefield d it seem that the constraints of travel reduced the expected number of contestants. Given that all were aware of the Australian venue for the world champs if they made the team, that factor may well hav proved to be a more significant deterent.

Both flying fields can only be described as medium-sized and both have hazards. At Barkston, construction activities in connection with Ministry of Defence procurement caused sufficient aggravation to bring a temporary halt to flying on the first day. Eventually, the problem resolved itself through a change of wind direction and speed - and be the departure of the contractors, who had been grossl and unreasonably obstructive in their behaviour. While it is a well-known fact that a site is the responsibility of the contractor while work is in progress (so limiting the jurisdiction of local RAF personnel in this instance) it is not lawful to retain items of identifiable property belonging to people when the people request that they be returned. Fortunately, this regretable episode caused relatively minor disruption.

At Ouston, the main hazard was lost models. With significant number of scattered trees, several coppices and an unfamiliar site for so many, there were many temporary and a few permanent losses in the breeze of the closing rounds. However, we must return to earlier times in the competition.

The first Saturday was a fairly typical early autumn day, with a light breeze and constantly changing sky. At times there was significant cloud cover after the initially bright start. Eventuall the cloud cover seemed to bring a swing in wind direction, requiring a change of launch site. The somewhat uncertain wind direction and shifts due to thermal activity caused some models to fall on D/T inside the newly fenced compound. Because of the difficulties of recovery, the half-hour round sequence of A/B/C was halted to enable discussions to take place with the RAF at Cranwell with the aim of reaching an amicable solution with the contractors. Although no suc thing was achieved, flying was able to be resumed without problems later in the afternoon.

The results show the familiar pattern of thermal activity with the late-in-the-day round breaking the ties, especially in glider. John Cooper retained the only perfect score after five rounds in the clas With the higher performance Wakefields, scores only began to seperat on the Sunday, but in power, the class agreed to have the greatest potential, round three and four brought Faux, Monks and Screen to the top, where they were to remain until the end.

Sunday was a more inclement day with greater cloud cover eventually bringing light drizzle and rain at times. Although the wind remained light, visibility became marginal, so it was agreed that timekeepers

Glider, F1A

		Sat 18 sept.....				Sun 19 sept.....				Sat 23 oct.....				
1	M Gregorie	M	M	M	M	142	145	M	140	M	M	M	M	M	M	= 2407
2	J Cooper	M	M	M	M	M	M	M	M	135	M	124	M	M	164	= 2403
3	S Philpott	M	M	M	M	156	M	M	148	M	M	M	M	135	145	= 2384
4	A Crisp	M	117	M	158	M	M	M	123	150	M	167	M	M	M	= 2335
5	C Edge	M	M	M	177	126	173	M	172	136	M	147	M	105	M	= 2296
=	E Drew	143	M	M	M	163	122	M	M	M	M	M	68	M	M	= 2296
7	M Fantham	M	M	M	55	133	M	M	M	M	M	177	M	164	143	= 2292
8	G Madelin	173	M	M	M	145	166	M	M	132	140	149	M	M	94	= 2259
9	C Pudney	95	M	M	M	135	137	M	151	M	M	M	128	M	151	= 2237
10	B Baines	103	M	M	56	155	123	M	177	M	137	170	M	156	M	= 2157
11	T Le Vey	M	M	M	119	M	M	M	145	98	M	M	M	70	94	= 2146
12	P Owen	153	170	154	154	M	M	M	M	135	M	M	30	115	144	= 2135
13	M Dilly	111	M	M	M	163	M	M	67	65	M	163	M	149	105	= 2083
14	D Barnes	101	M	M	M	122	105	M	107	122	M	101	M	M	125	= 2043
15	P Stewart	M	M	M	M	128	170	M	99	139	M	132	74	110	67	= 1999
16	A Jack	M	M	M	M	151	M	M	91	M	M	M	125	6	–	= 1993
17	P Jellis	161	150	M	120	91	89	M	115	125	M	48	M	M	129	= 1928
18	N Willis	122	M	M	M	M	M	M	114	102	123	132	88	81	77	= 1919
19	G Pink	83	71	M	M	169	48	M	0	M	M	M	M	170	110	= 1911
20	P Putnam	150	167	M	80	M	M	M	134	36	M	47	59	160	51	= 1824
21	B Nicholson	177	95	M	79	52	89	M	M	120	98	138	29	M	175	= 1772
22	B Lavis	M	125	M	132	161	M	M	171	132	M	–	–	–	–	= 1621
23	A Cordes	M	M	M	M	130	131	113	125	M	M	–	–	–	–	= 1579
24	J Baguley	105	M	M	M	M	115	M	M	147	104	–	–	–	–	= 1551
25	S Oldfield	51	57	M	75	117	95	M	105	82	129	30	126	M	137	= 1544
26	G Le Vey	0	M	0	43	151	96	135	96	131	157	145	110	M	96	= 1520
27	A Gibbs	150	165	M	152	172	111	M	136	M	90	–	–	–	–	= 1516
28	C Williams	M	74	M	136	137	M	M	140	M	94	–	–	–	–	= 1481
29	J Cuthbert	120	M	M	171	115	76	M	M	128	95	–	–	–	–	= 1425
30	S Darman	M	69	M	M	102	167	M	91	74	M	–	–	–	–	= 1403
31	M Cook	137	M	103	M	86	146	M	0	M	163	–	–	–	–	= 1355
32	C Parry	M	M	M	32	94	M	M	97	112	94	–	–	–	–	= 1329
33	J Abbey	151	M	M	149	92	148	126	142	72	–	–	–	–	–	= 1240
34	J Williams	46	M	121	M	115	153	M	M	76	–	–	–	–	–	= 1231
35	D Bartle	M	102	M	88	81	M	M	95	133	0	–	–	–	–	= 1211
36	C Abbey	M	86	M	60	119	80	85	173	80	–	–	–	–	–	= 1043
37	J Wheddon	83	M	70	67	107	141	M	28	88	78	–	–	–	–	= 1022
38	D Oldfield	80	M	0	88	80	89	138	121	0	–	130	92	–	–	= 998
39	I Bracken	M	62	176	0	0	80	M	50	161	93	–	–	–	–	= 982
40	W Colledge	0	0	76	64	0	126	M	140	171	M	–	–	–	–	= 937
41	M Gilmore	78	M	M	83	126	95	155	0	–	–	–	–	–	–	= 897
42	M Corless	129	122	127	M	139	112	0	–	–	–	–	–	–	–	= 809
43	J Carter	58	86	M	M	M	67	–	–	–	–	–	–	–	–	= 751
44	B Bates	102	71	M	M	85	-.	–	–	–	–	–	–	–	–	= 618
45	N Parry	62	165	29	135	130	92	–	–	–	–	–	–	–	–	= 613
46	G Beal	M	M	102	118	0	–	–	–	–	–	–	–	–	–	= 580
47	J Bailey	M	M	M	0	–	–	–	–	–	–	–	–	–	–	= 540
48	L Rogers	88	125	M	98	–	–	–	–	–	–	–	–	–	–	= 491
Maxes		19	28	37	20	8	14	35	9	12	21	8	13	11	5	
Full houses			12	11	6	1	1	1	1	0						

Wakefield, F1B

		Sat 18 sept.....				Sun 19 sept.....				Sat 23 oct.....				
1	D Hipperson	M	M	M	M	M	M	M	M	M	M	164	M	M	M	= 2504
2	I Taylor	M	M	M	155	177	M	M	M	M	M	167	M	M	M	= 2479
3	M Howick	M	M	M	M	M	M	M	M	160	M	150	M	M	M	= 2470
4	L Burrows	M	M	M	M	M	173	M	M	M	M	M	M	M	131	= 2464
5	B Spooner	M	M	M	174	170	M	M	M	163	157	156	M	M	M	= 2440
6	D Greaves	M	M	M	M	M	M	M	M	M	123	M	M	M	145	= 2428
7	A Wells	146	M	130	M	174	M	M	M	M	M	170	M	M	M	= 2420
8	J Barnes	M	162	M	M	M	M	M	M	M	135	128	M	M	M	= 2405
9	R Pollard	M	M	M	M	M	145	M	M	M	M	M	95	M	M	= 2400
10	M Woodhouse	160	M	M	M	M	120	M	M	M	M	M	145	169	M	= 2394
11	B Peers	M	M	M	146	178	158	M	M	M	160	171	M	M	130	= 2383
12	N Beaumont	159	M	M	M	M	M	M	M	M	M	170	106	140	M	= 2375
13	I Kaynes	167	135	141	M	M	165	M	M	M	M	M	M	111	137	= 2296
14	B Martin	128	87	M	138	178	139	M	M	176	M	M	M	M	M	= 2286
15	M Evatt	92	114	153	M	142	M	M	M	108	159	128	117	M	166	= 2079
16	R Miller	162	165	151	M	M	M	M	M	154	M	–	–	–	–	= 1712
17	B Lavis	M	M	M	M	139	165	M	M	138	169	–	–	–	–	= 1691
18	C Williams	M	122	M	133	155	M	M	M	M	M	–	–	–	–	= 1690
19	M Duce	114	M	91	113	122	123	M	105	167	147	128	95	109	7	= 1681
20	P Ball	M	126	147	M	M	M	M	155	170	131	–	–	–	–	= 1629
21	J Abbey	165	123	M	143	130	131	M	M	M	M	–	–	–	–	= 1592
22	G Walker	M	170	150	105	144	161	M	M	M	141	–	–	–	–	= 1591
23	B Rowe	M	M	M	M	80	M	M	M	63	M	–	–	–	–	= 1583
24	M Dixon	112	M	M	M	128	165	115	M	173	100	–	–	–	–	= 1513
25	I Dowsett pr R Green	157	120	M	M	M	158	0	M	M	152	–	–	–	–	= 1487
26	J Gunn	162	M	M	117	173	M	141	126	118	–	–	–	–	–	= 1377
27	M Pressnell	175	148	36	125	116	128	M	123	143	M	–	–	–	–	= 1354
28	K Proctor	149	148	45	176	176	M	147	M	47	88	–	–	–	–	= 1336
29	K Harrison	122	M	62	10	124	85	145	M	122	110	–	–	–	–	= 1140
30	J Cooper	144	M	148	M	116	157	–	–	–	–	–	–	–	–	= 925
31	I McDonald	46	46	48	–	–	–	–	–	–	–	–	–	–	–	= 140
Maxes		14	18	19	18	12	15	24	25	15	15	6	11	12	10	
Full houses			10	10	7	5	3	3	3	2	1	0				

should be permitted to move downwind after the models, at their own discretion, to ensure greater accuracy in recording the scores. Although such a procedure is far from ideal, in the circumstances, it appears to have been a practical solution to the inherent problem and no complaints were registered, either for over or under scoring. After a tiring weekend for all taking part, ten of the fourteen rounds had been flown. A five week gap gave time to draw breath and to analyse one's chances. In Wakefield, there were eight flyers within one minute of third place man Howick; seven in a similar position in glider behind Drew. Fourth place power man Johnson knew that he had to keep on maxing while assuming that one of the top three would fall from the perch...

Saturday 23rd October brought a surprise for those who had arrived at the venue on the previous night - the cars were heavily coated in frost! This was the first cold snap since last winter. Ouston and the Northumbrian hills looked impressive, if bleak, but the breeze was light. It seemed just possible that we would be able to complete the four rounds in the day, if the luck held.

Although the air was cool, bright sunshine soon melted the hoar frost on the grass. Later, a regular cloud pattern passed overhead, bringing cooler periods and a wind swing which developed from the lightest of drifts into a steady breeze. It was not long before models started to D/T near, or on, one of the hangars and it became essential to move the line once more. Ouston is an undulating location, so once again timekeepers were permitted a larger than normal range of movement while performing their duties. This element of co-operation enabled much more of the airfield to be used and was to ease the problems of retrieval. Nevertheless, as mentioned earlier, many aircraft proved very difficult to trace, especially in the short time available. Some were easy to find, being in the tops of trees. Much bowmanship (and actual climbing) was called into service on the Saturday evening and the Sunday morning, when the shouting had died down and the event completed.

And so the contest finished on Saturday afternoon. The element of drama was maintained until the end in classes A and B, with Philpott dropping time on rounds 13 and 14, while Cooper's 16 second deficit on his last round brought Martin Gregorie through to the number one slot. In Wake, Laurie Burrows who took the lead in round eleven came unstuck in the last round to move down to fourth, six seconds behind third place man Mike Howick.

So what of the teams? It is understood that David Hipperson has indicated that he would not be interested in taking up his place on the Wakefield team. Other people also are expressing reservations. The reason is not hard to find - money.

Given the venue, the most significant part of the unavoidable cost element will be the air fare. Although it seems likely that some discounted arrangement can be negotiated, the SMAE technical committee is likely to be looking for a sum in the region of £10,000 if it were to pay all team expenses. The nine flyers will need support. First, there is the team manager, but given the logistical problems it is out of the question to expect one person to handle everything. An eleventh man is mandatory. What is more, with the likelihood of few others from Britain attending the event, even eleven able bodies is stretching things very tight. One thing is certain: team fund coffers are not in a state where such sums of money can be found.

Power, F1C

	Sat 18 sept.....					Sun 19 sept.....					Sat 25 oct.....						
1 S Screen	M	M	M	M	M	M	M	M	M	M	M	M	M	= 2520	+ 240		
2 R Monks	M	M	M	M	M	M	M	M	M	M	M	M	M	= 2520	+ 15		
3 K Faux	M	M	M	M	M	M	M	M	M	M	M	M	M	= 2520	+ o/r		
4 R Johnson	M	M	173	M	M	M	M	M	M	M	M	M	M	= 2515			
5 R Baggott	M	M	129	158	M	M	M	179	M	108	M	M	M	= 2374			
6 J Bailey	M	M	M	M	163	M	M	M	M	169	M	175	118	127	= 2370		
7 P Harris	M	M	132	174	172	156	M	138	M	168	M	M	-	-	= 2020		
8 F Chilton	159	M	M	172	157	M	M	167	M	M	-	-	-	-	= 1715		
9 P Rowledge	M	M	173	M	M	169	99	177	M	M	-	-	-	-	= 1698		
10 J Spooner	176	M	M	160	88	152	M	160	178	M	-	-	-	-	= 1614		
11 A Jack	M	M	174	100	101	M	M	141	M	M	-	-	-	-	= 1596		
12 R Collins	M	175	4	M	M	M	M	137	M	M	-	-	-	-	= 1576		
13 J Sayer	M	M	M	172	149	112	M	161	127	134	-	-	-	-	= 1575		
14 P Bond	M	35	154	M	M	M	18	-	-	-	-	-	-	-	= 925		
15 M Chilton	144	M	134	100	164	85	100	-	-	-	-	-	-	-	= 905		
16 L Moore	61	85	60	119	126	-	-	-	-	-	-	-	-	-	= 451		
Maxes	12	13	8	7	8	10	12	5	11	10	6	6	5	5			1
Full houses		10	6	4	3	3	3	3	3	3	3	3	3	3			

At the moment, there are two solutions worthy of investigation: Sports Council funding (a topic which has gone very quie of late) and more hopefully but still a very long shot in the present economic climate, sponsorship. While individual sponsorship might appear the more practical because of the smaller sums involv the only equitable solution would be to find a lump sum from one or a number of organisations - perhaps with Australian connections. The first choice would seem to be a brewery. Now, you lads in New South Wales, can you assist us with a joint arrangement? Fosters lager is marketed here by Watney Mann. Who are your contacts?

SNIPPETS ON THE WORLD CHAMPS

Australian free flighters are making gargantuan efforts to ensure that next year's event is a success. Full details later, but here is a resume: dates, 28th September - 4th October. Venue, TSR field located about 15km from Goulburn and 208km south of Sydney, NSW. Elevatio of the field is 2,100 feet, quoted wind speeds are 6 to 10 km/hr with mean minimum temperature of 5.2°C and mean maximum of 20°C. Spectator accommodation will be US$300 and contestants, US$50.

NOTICEBOARD

Model Engineer Exhibition 1983: Martin Dilly tells us that a talk/demonstration/slide show entitled 'Have glider, will travel' will be given by Mike Fantham and some other British international flyers at the ME exhibition due to be held at the Wembley Conference Centre at 15.15 hrs on Saturday 8th January 1983. Sub-titled 'Highlights and developments in 25 years of worldwide model flying', the 105 minute presentation will cover techniques, incidents and personal approaches to free flight and is aimed to appeal both to the interests of laymen and free flighters in general.

Bulk Purchasing: we are pleased to tell readers that supplies of FAI Model Supplies rubber in the $\frac{1}{8}$ inch (3mm) size have now arrived with David Stapleton. Place your orders now. For full details, please refer to the September edition which included a leaflet on bulk purchasing. Due to the unusually low value of the £ against the US$, the price is £10-50 inland and £11-50 abroad.