

Free Flight News

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FFn DIARY

CIAM Calendar of events for 2022 not yet finalised

February 12-14 Kiwi World Cup of New Zealand. World
Lost Hills, USA Cup. F1A B C Q P E

February 16 North American Cup of Canada F1A B C Q
Lost Hills, USA

February 17-21 Bob White Memorial Max Men
Lost Hills, USA International. World Cup. F1A B C Q E

February 27 1st Area - Winter Warmer. CG, CR, CP, CE
Area Venues (Plugge), F1J (Plugge), E36, Mini Vintage,
P30 (Plugge), H/CLG. Contact: Area Comp
Secs.

March 5-6 Eagle Cup. F1A F1B F1C F1Q. World Cup
Gjovik, Norway event. Contact: Vegar Nereng, Steinbruddv
10, 2846 Boverbru, Norway, tel
+4793207424 email: vnereng@online.no

March 6 Danish Winter Cup. F1A F1B F1C F1P F1Q,
Mjosa, Norway F1S. World Cup event. Contact: Steffen
Hjorth Jensen, Bognaesvej 14, 4000
Roskilde, Denmark, tel +4525332105 email:
steffen.hjorth.jensen@gmail.com web:
<http://norbergssfk.se/swedishcup>

March 11 Swedish Moose Cup. F1A F1B F1C F1Q.
Sakylan Pyhajarvi, World Cup event. Contact: Per Findahl,
Finland Bergvägen 8, 738 33 Norberg, Sweden, tel
+46709226276 email:
per.findahl@gmail.com

March 12 Bear Cup. F1A F1B F1C F1Q. World Cup
Säkylä, Pori, event. Contact: Kim Henriksson,
Finland Ymmerstanmaki 98, FI-02750 Espoo,
Finland, tel: +358 50460 6393, email:
kim.henriksson@eerika.com

March 19-20 31th Herend Cup. World Cup. F1A B C P Q
Tapolca, Hungary

March 19 Kartel-Cup Pieter de Boer Memorial. World
Kietzr, Poland Cup. F1A B C Q

March 20 SPZG Cup, Antoon van Eldik Memorial.
Kietzr, Poland World Cup. F1A B C Q

March 26-27 Coppa Volo Libero. F1A F1B F1C F1Q.
Padule di Bientina, World Cup event. Contact: Fabrizio
Italy Ceccarini, Via Legnano 3, 10128 Torino,
Italy, tel +393474308840_ email:
f.ceccarini@tin.it

March 26-27 Raná (1) and (2). 2 F1E World Cup events.
Litoměřice, Czech
Republic

March 27 BMFA 2nd Area - Spring Sorter. CR, CP
Area Venues (White), CE, F1A (SMAE), F1H, F1G
(Plugge), E36 (Plugge), Mini Vintage
(Plugge), H/CLG. Contact: Area Comp Secs.

April 4-8 Elbrus Cup. World Cup. F1A B C P
Nalchik, Russia

April 8-10 Harghita Cup. World Cup. F1A B C P Q
Simeria, Romania

April 8-12 Naloev Cup. World Cup. F1A B C P
Nalchik, Russia

April 10 Widgiewa Cup. F1A F1B F1C. World Cup
Narrandera, NSW, event. Contact: Phil Mitchell, PO Box 44,
Australia Terrigal, NSW 2260, Australia, tel
+61419414653 email:
filnoels@bigpond.net.au

April 11-12 Australian Free Flight Championships. F1A
Narrandera, NSW, F1B F1C. World Cup event. Contact: Phil
Australia Mitchell, see details for Widgiewa Cup
above.

April 10-11 2 F1E World Cup events. 17th: Otto Kuttler
Oberkotzau, Cup, 18th: Fohrlberg Cup. Contact: Peter
Germany Kuttler, Schneebergstr 26, 95145
Oberkotzau, Germany, tel +491609451646
email: peter-kuttler@web.de

April 13-14 Southern Cross Cup. F1A F1B F1C. World
West Wyalong, Cup event. Contact: Roy Summersby, 123
NSW, Australia The Esplanade, Umina Beach, NSW 2257,
Australia, tel +61 243410072
roydi123@optusnet.com.au

April 15 (Good BMFA Northern Gala. CG (CMA), CR
Friday) (Caton), CP (Hamley), CE, F1H, 1/2A,
Barkston Heath SLOP (Falcons), Mini Vintage, P30, H/CLG,
E30. Club Championships for CG, CR, CP,
CE. Contact Phil Ball 07470177947
Phil.ball@ntlworld.com

7 Ashley Road, Farnborough, Hants, England GU14 7EZ

email: info@freeflightnews.org.uk

Web site address: <https://www.freeflightnews.org.uk/home.htm>

Compiled and produced by Ian Kaynes

WINDRUSH MK2 HI-START GLIDER BY ANDREW CRISP

Windrush Mk.2 is a sport model for contest flyers. That is, the shape looks the part, the construction looks quite technical and it's just the job to take out to your nearest grass space for a quick session on a calm evening, with plenty of trimming possibilities to get your teeth into.

Just to clear up the difference twix catapult and hi-start. The former usually applies to chuck glider sized jobs (or smaller) launched by a 6" loop of rubber, and often competitively flown alongside regular HLGs or discus tip-launch models. Hi-start, by comparison, is a kind of towline in which a portion of its length is rubber, typically 25%, say 7.5 metres in 30m of line.

This is attached to a stake in the ground, or in my case, the handle bars of my bicycle. The model end of the affair had a regular tow ring and timer release pin. It is surprising to realise how little "power" you need to get the model to the top of the line. 2 or 3mm rubber is all that is required, even for an F1H size of glider.

Of course, the stretch required depends upon the wind strength. Dead calm is an, no. The model will just flop off the line a few feet up. The ideal is about 5 mph, whatever that is in m/sec!

Operation is delightfully simple. You hook the model to the tow ring, walk backwards stretching the rubber as far as you dare, /aim into the wind and release. If all goes well, the model will rise to the top of the line, perhaps hunt a bit, then release itself, as if by magic, to fly free.

This is the idealized situation. What can happen is that something sticks. The ring may not come off the tow hook. Answer – bend the parallel part of the hook slightly downwards not upwards, as is normally the case in straight-tow gliders. The pull-out pin, which operates the autorudder and timer start, may not pull out. Answer – make the band or spring tensions (which connect up the functions) lighter.

However you try to make the systems foolproof in the workshop, something often sticks in actuality, so I sought to devise a method without pull-out pins, etc, which would give a glide circle and a timer start. Enter the offset tow hook. As this is quite a small model, the offset of the hook from the centre line of the fuselage needs only to be about 10mm (3/8"). There is no autorudder. A Gurney flap drag strip on the right side of the fin sets the turn. Tail tilt does the rest. Both are easily adjustable, as required.

The button timer (powered with no.5 elastic) is wound on, and held with the hand until the model is released. The time on the line is usually about 10 sec, so a bit extra "on the clock" is hardly going to be an issue.

Jedelsky construction is quite easy – no more than a large chuck glider – and quite resilient against corn stalks and the like. I wouldn't say that Jedelsky construction is better aerodynamically than regular 'open' construction, but it is easily trimmed and very stable, perhaps brought about by the flow straightening effect of the exposed wing ribs.

I finish the model with a light coat of dope over talc rubbed into the wood grain. I coat the whole model with Ronseal outdoor satin varnish. If you put the Ronseal in a saucepan of hot water, it thins down and bushes on easily. Allow a couple of days to really dry then buff up with the finest wet and dry.

The model originally had a two element slotted tail as propounded a while back by the Israelis. It flew OK but looked

"draggy" on the glide. A simple balsa curved plate replacement improved things considerably.

Assuming a right turn, when you release the model, the hook offset veers if slightly left on the way up. As it reaches the top of the line the rudder and tail tilt take over and give a smooth right turning release. Believe me, it works.

Twang and have fun!

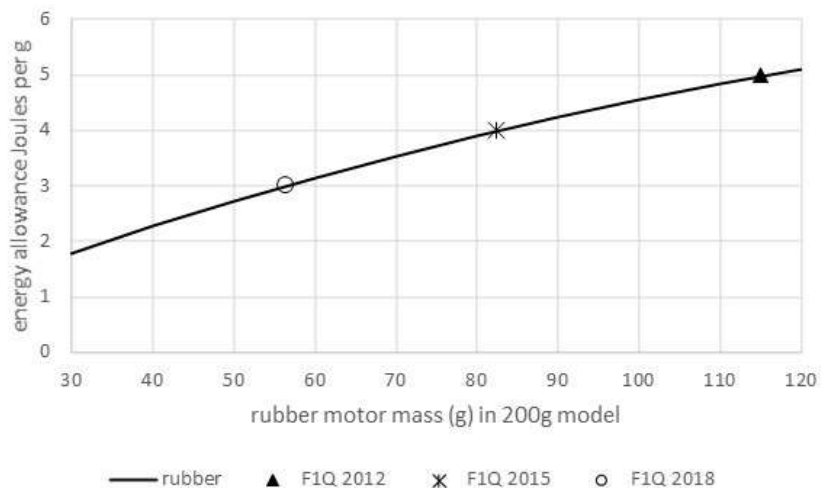
F1Q ENERGY ALLOWANCE

A recent discussion about the energy allowance in F1Q, which is currently 3J per gram of model mass in the rounds or 2 J per gram for flyoffs, prompted me to compare the F1Q energy allowance to the energy in an F1B rubber motor.

A typical good FAI Super Sport motor may store about 4550 ft lb per lb of rubber mass (Paul Rossiter typical values in article in 2016 NFFS Symposium report). This equates to 301 ft lb energy for a 30g rubber motor and that converts to Joules as 408 J. This is in a model with 230g total weight, so the energy is 1.77J per gram. The line in the plot below shows the equivalent energy allowance for a 200g F1B model with various motor weights.

The F1Q allowances are marked by symbols on the line. When energy limitation was first introduced to F1Q in 2012 the energy allowance was 5J per gram, equivalent to a 115g motor in an F1B model. In 2015 that was reduced to 4J per gram which is an 82g motor. In 2018 went down to the current value of 3J per gram and this is equivalent to 56g of rubber in an F1B model.

There are arguments to suggest that the direct linkage of the energy source to the prop in F1B is more efficient than the conversion of electrical energy into mechanical energy via a motor and possibly a gearbox before it reaches the prop. But it is still an interesting comparison and shows how the F1Q allowance is heading down towards the current rubber motor.



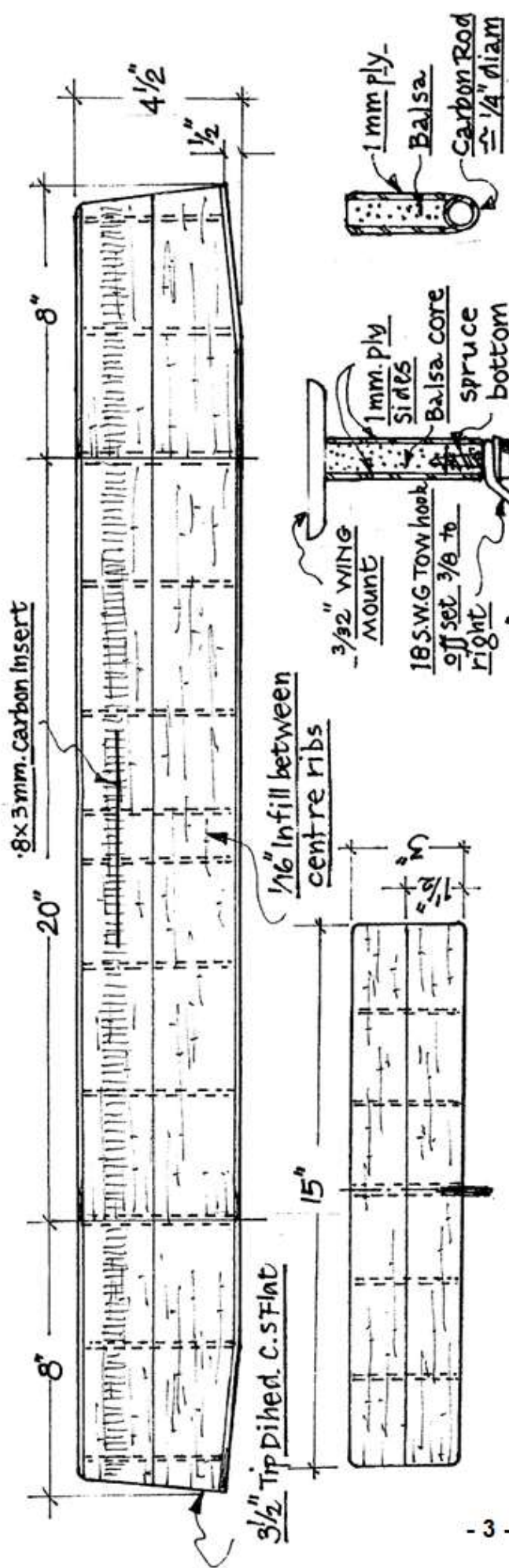
NEWS FROM BMFA FF TECH COMMITTEE

All correspondence re this news to the FFTC Secretary: Simon Dixon, 8 Capulet Drive, Bards Meadow, Warwick Gate, Warwick CV34 6EU email; Dixonfamily100@yahoo.co.uk

The FFTC held an internet virtual Zoom meeting from their homes on 15 December 2021.

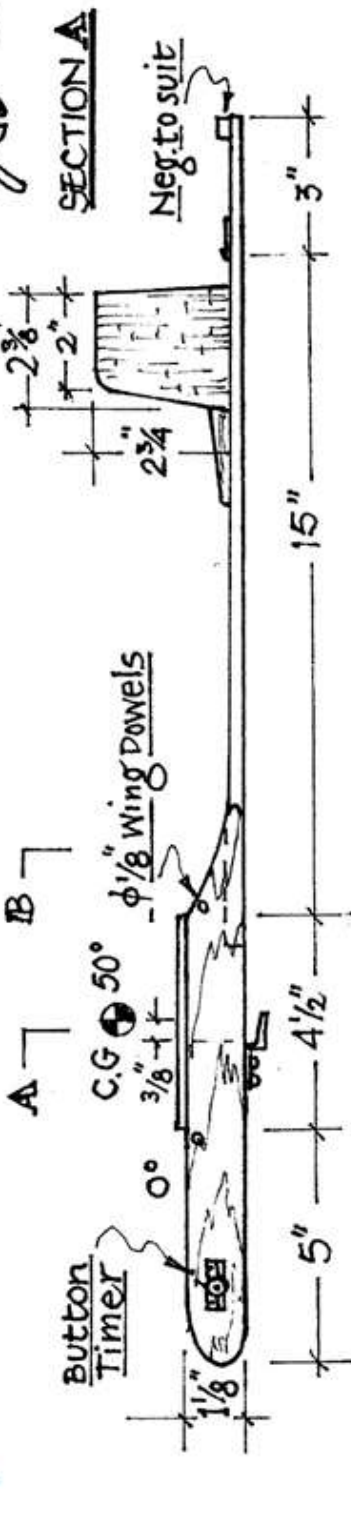
The FFTC

Following an election this year the FFTC will be formed of Mike Woodhouse (Chairman), Simon Dixon (Secretary), John Carter (Treasurer), Ken Faux (PRO), Phil Ball (Council Delegate) and Mark Bennis (Rules and Safety Officer). Specialist Bodies are represented by Trevor Seabrook (FAIR Space) and TBC (SAM). Ian Kaynes is FAI representative in a non-voting status.

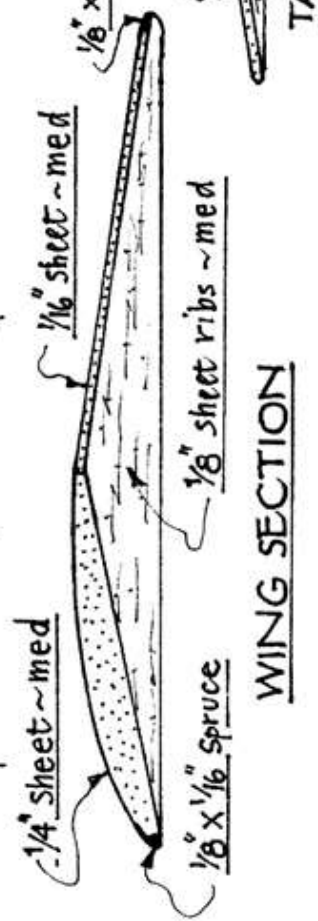


SECTION B

SECTION A



LAUNCHING SET-UP
 7.5 m rubber (1/8 or 3/32)
 Plus 22.5 m nylon ~
 20 lb B.S.



WING SECTION



TAILPLANE SECTION

WINDRUSH M[#] 2
 a hi-start glider
 A. J. Crisp Dec '21

Welcome to Simon for joining the team and volunteering to be Secretary. We would like to thank Stephen Philpott for his excellent hard work over the last couple of years on the committee.

Nats 2022

The Centenary of the BMFA in 2022 coincides with the Queen being on the throne for seventy years. There is a special four day bank holiday to celebrate the Queens anniversary and the FFTC are keen to use it for a one off four day Nationals at Barkston Heath to celebrate the BMFA centenary. We still need to get final clearance for the use of Barkston Heath, but early enquiries look positive. The bank holiday will be a week later than our usual end of May weekend, it will run from Thursday 2 June to Sunday 5 June. The details of which events are on each day are still being finalised and will be announced when we have confirmation of the airfield being available. Let's hope that we can return to a great Nationals at Barkston Heath after a couple of years away.

2022 Calendar

The F1A, B, C Team Selection, Womans Cup and Junior at the Nationals and Buckminster Gala are excluded from the Free Flight Championships.

Please also note that ONLY Team Selection events are subject to postponement due to unsuitable weather

February 27 Area Venues	1st Area - Winter Warmer. CG, CR, CP, CE (Plugge), F1J (Plugge), E36, Mini Vintage, P30 (Plugge), H/CLG. Contact: Area Comp Secs.
March 27 Area Venues	2nd Area - Spring Sorter. CR, CP (White), CE, F1A (SMAE), F1H, F1G (Plugge), E36 (Plugge), Mini Vintage (Plugge), H/CLG. Contact: Area Comp Secs.
April 15(Good Friday) Barkston Heath	Northern Gala. CG (CMA), CR (Caton), CP (Hamley), CE, F1H, 1/2A, SLOP (Falcons), Mini Vintage, P30, H/CLG, E30. Club Championships for CG, CR, CP, CE. Contact Phil Ball 07470177947 Phil.ball@ntlworld.com
April 21 - 24 Peak District or Melton Mowbray	1 st F1E. Flying on 1 or 2 days according to weather. Contact: Ian Kaynes 01252 512538 kaynes@btinternet.com
May 1 Area Venues	3rd Area - Gamage Day. CG, CR (Gamage), CE, F1C (Halfax, Plugge), F1Q, Vintage G (Plugge), P30, H/CLG (Plugge), Tailless, 1/2A, E36, Mini Vintage. Contact: Area Comp Secs.
May 7-8 Salisbury Plain	London Gala. Saturday events CG, CR, CP, CE, Mini Vintage. Sunday events F1H, F1G, F1J, P30, H/CLG, E30, CO2. John Carter 01782 398816 Nordicfla@outlook.com
May 12 – 15 Peak District or Melton Mowbray	F1E Team Selection 1. 1 or 2 days according to weather. Contact: Ian Kaynes 01252 512538 kaynes@btinternet.com
June 2 – 5 Barkston Heath	Nationals. CG (Thurston), CR (Model Aircraft), CP (Shelley), CE, F1A (Ronytube), F1B (Boxall), F1C (Cosh), F1Q (Astral), F1H (BA), F1G (308), F1J (Quickstart), 1/2A (Hales), E36 (Short), Vintage RP (Jubilee), Vintage G, Classic RP, Classic G (Ripmax), SLOP (Harris), Mini Vintage (Weston), P30 (Flight), H/CLG (Nats), Tailless (Lady Shelley), E30, CO2 (Sparklets). Mike Woodhouse 01603 457754 Michael.woodhouse1942@gmail.com

June 9-12 Peak District or Melton Mowbray	2nd F1E. SMC trophy. Flying 1 or 2 days according to weather. Contact: Ian Kaynes 01252 512538 kaynes@btinternet.com
June 19 Area Venues	4th Area - Team Power Day. CG, CP (Team, Keil, Plugge), CE, F1B (Gutteridge), Vintage RP (Plugge), Mini Vintage, H/CLG, E30 (Plugge), P30, F1J. Contact: Area Comp Secs.
June 25-26 Barkston Heath	Team Selection. F1A, F1B, F1C. Contact Phil Ball 07470177947 Phil.ball@ntlworld.com
July 10 Area Venues	5th Area - Summer Mini Day. CG, CR, CP, F1H (Plugge), F1G, 1/2A (Plugge), E36, H/CLG, CO2 (Plugge), Mini Vintage, P30, E30 (Plugge). Contact: Area Comp Secs.
July 14 -17 Peak District or Melton Mowbray	3 rd . F1E Team Selection 2. 1 or 2 days according to weather. Contact: Ian Kaynes. 01252 512538 kaynes@btinternet.com
July 30 – 31 Sculthorpe	East Anglian Gala. CG, CR, CP, CE, E36, Vintage RP, Vintage G, Classic RP, Classic G, Mini Vintage, P30, H/CLG, Tailless, CO2. Mike Woodhouse. 01603 457754 Michael.woodhouse1942@gmail.com
August 21 Salisbury Plain	Southern Gala. CG, CR, CP, CE, F1H, F1G, F1J, 1/2A, H/CLG, E30. Ken Faux 01279 721008 Ken.faux@btinternet.com
September 3 Salisbury Plain	Stonehenge Cup . F1A, F1B, F1C, F1Q. John Carter 01782 398816 Nordicfla@outlook.com
September 4 Salisbury Plain	Equinox Cup. F1A, F1B, F1C, F1Q. John Carter 01782 398816 Nordicfla@outlook.com
September 11 Area Venues	6th Area - KMAA Day . CR, CP, CE, F1A (Plugge KMAA), F1Q (Plugge), F1J, Vintage RP, SLOP, Mini Vintage, P30, H/CLG, Tailless (Plugge). Contact: Area Comp Secs.
September 15 – 18 Peak District or Melton Mowbray	F1E Team Selection 3. 1 or 2 days according to weather. Contact: Ian Kaynes 01252 512538 kaynes@btinternet.com
September 24-25 Venue TBC	Team Selection Reserve 1. F1A, F1B, F1C.. Contact Phil Ball 07470177947 Phil.ball@ntlworld.com
October 2 Area Venues	7th Area - Team Rubber Day. CG, Team CR (Farrow Shield, Plugge, team), CE, F1C (Buskell), Classic RP (Plugge), Classic G (Plugge), H/CLG, 1/2A, E36. Contact: Area Comp Secs.
October 13 – 16 Peak District or Melton Mowbray	6th F1E. Reserve for team selection if required.. Contact: Ian Kaynes 01252 512538 kaynes@btinternet.com
October 16 Area Venues	8th Area - Team Glider Day. CG (Model Engineer, Plugge, Team), CP, F1B (Duce, Plugge), SLOP (Frog Senior, Plugge), Mini Vintage, H/CLG, E30, P30, F1J. Contact: Area Comp Secs.
October 29 (Saturday) Venue: TBC	Midland Gala * Team Selection fall back. F1H, F1G, 1/2A, E36, SLOP, Mini Vintage, P30, H/CLG, CO2.. Contact Phil Ball 07470177947 Phil.ball@ntlworld.com
November 6 or 13 Buckminster	Buckminster Gala. Events TBC. Contact TBC

CLG BY JIM LEUKEN

From NFFS Digest with thanks.

I built my first Catapult Glider about four years ago, a Buddenbohm Turn Cat. It was a fun project taking me back to the 1980s when I flew a lot of HLG.

Not wanting the fun to end I decided to build a second one. This time I used a Buddenbohm/Ray fuselage and a 20" Shockwave wing I carved back in 1985 but never used.

It flies very well and placed second at this year's San Valeers annual. With the possible change to 90-second maxes I decided to design something for early mornings. I chose to use a pop-up stab DT for two reasons: One...I wanted to get the model back and two...the pop-up stab requires less "stuff" which saves weight and drag. The goal for finished weight was 20 grams or less...not happening, it weighs 22 grams mostly due to leaving too much meat on the wing. So far I've had it out for two trimming sessions and it's looking very promising. Launches are very straight with a smooth transition.

The field I used is quite small so I haven't been able to let it glide. Why the brass nose weight? "Cool" factor, what else! If you decide to build one or have questions I'd love to hear from you.

Special thanks to Bill Blanchard for his wonderful drawings presented here. *FFn reproduction here is 92% of full size.*

NEGEV OPEN, URIM, ISRAEL, DEC 16

F1A 22 flew 14 full scores

1	G Malizki (J)	ISR	900	+360	+463
2	N Hedomi	ISR	900	+360	+351
3	E Galor	ISR	900	+360	+330

F1A-Junior 5 flew 3 full scores

1	G Malizki	ISR	900	+360	+463
2	I Atali	ISR	900	+319	

F1B 15 flew 9 full scores

1	G Mitzmacher	ISR	900	+300	+245
2	E Shimshi (J)	ISR	900	+300	+229
3	G Mark	ISR	900	+300	+210

F1B-Junior 6 flew 3 full scores

1	E Shimshi	ISR	900	+300	+229
2	R Eveansky	ISR	900	+195	

F1C 6 flew 6 full scores

1	S Nagari	ISR	900	+300	+215
2	E Shemesh	ISR	900	+300	+160
3	A Elyakim	ISR	900	+246	

F1Q 5 flew

1	O Sirkis	ISR	900		
2	Y Vaknin	ISR	899		

F1Q-Junior 1 flew

1	E Brodesky	ISR	411		
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HANUKKAH OPEN, URIM, ISRAEL, DEC 17-18

F1A 27 flew

1	H Elkayam	ISR	930	+360	+383
2	A Levy	ISR	930	+360	+353
3	S Isakov	ISR	930	+360	+317

F1A-Junior 5 flew

1	E Cohen	ISR	803		
2	G Malizki	ISR	797		

F1B 19 flew 14 full scores

1	Y Sarig (J)	ISR	960	+360	
2	Y Karpel	ISR	960	+308	
3	V Man	ISR	960	+303	

F1B-Junior 6 flew 4 full scores

1	Y Sarig	ISR	960	+360	
2	E Shimshi	ISR	960	+262	

F1C 6 flew 5 full scores

1	Y Itzhakov	ISR	960	+360	+477
2	S Nagari	ISR	960	+360	+438
3	E Shemesh	ISR	960	+327	

F1Q 8 flew 4 full scores

1	S Sitton	ISR	960	+337	
2	O Sirkis	ISR	960	+319	
3	E Hava	ISR	960	+168	
3	A Levy	ISR	960	+168	

F1Q-Junior 3 flew

1	E Brodesky	ISR	826	+826	
2	M Shir	ISR	795	+795	

WORLD CUP 2021 FINAL POSITIONS

With the Israel competitions completed the short 2021 World Cup has now finished. The top places are show below. There will be more complete results and analysis in the February FFN.

F1A

1	P Findahl	SWE	2093		
2	M Mandichev	BUL	2086		
3	D Fric	CZE	2019		

F1B

1	A Andriukov	USA	2072		
2	V Tomljanovic	CRO	2049		
3	I Yurtseven	TUR	1977		

F1A-Junior F1B-Junior

1	P Klobusicky	SVK	2024	1	F Jackel	GER	2020
2	A Pozharska	MKD	1761	2	F Cabaravdic	BIH	2005

F1C

1	D Jermol	CRO	2019	1	V Mihaly	HUN	2047
2	S Bauer	HUN	1510	2	F Gradi	ITA	1955
3	G Briere	FRA	1351	3	A Lindner	GER	1408

F1Q

1	V Mihaly	HUN	2047				
2	F Gradi	ITA	1955				
3	A Lindner	GER	1408				

F1P-Junior

1	M Karamalakov	BUL	1000	1	E Brodesky	ISR	1003
2	V Zibirov	RUS	881	2	L Horak	GER	1000

F1Q-Junior

1	E Brodesky	ISR	1003				
2	L Horak	GER	1000				

F1E

1	J-L Drapeau	FRA	1928	1	J Wisniewski	POL	1061
2	A Trachez	FRA	1745	2	V Hasardzhiev	BUL	1006
3	R Sifleet	USA	1145				

F1E-Junior

1	J Wisniewski	POL	1061				
2	V Hasardzhiev	BUL	1006				

FREE FLIGHT RANKING

The ranking calculations normally gives full points for competitions during the last year and points from the year before last reduce with time so that points reach zero for events which were held 2 years ago.

In view of the lack of competitions for 16 months from March 2020 to June 2021 the scheme has been adjusted to ignore that 16 month period, so that in the November 2021 ranking full points are scored for all events from July 2019 and scores taper to zero for events in July 2018. The ranking positions of July 1 2021 (when World Cup restarted) were thus the same as the positions had been on March 1 2020. Events during July and August were incorporated in the September rankings and the changes shown below are relative to those September scores and positions. This 16 month period will be maintained until a full 2 years of competitions have been held, that is until July 2023.

The following tables give the ranking positions for November 1 2021. As a reminder the recent scores column show the points scored from an event identified with the 2-character World Cup code and 21 to denote the year. For each event the first score is the direct World Cup points and the second part is the points

CLG DESIGNED BY JIM LUEKEN

FLAT SPAN: 18"

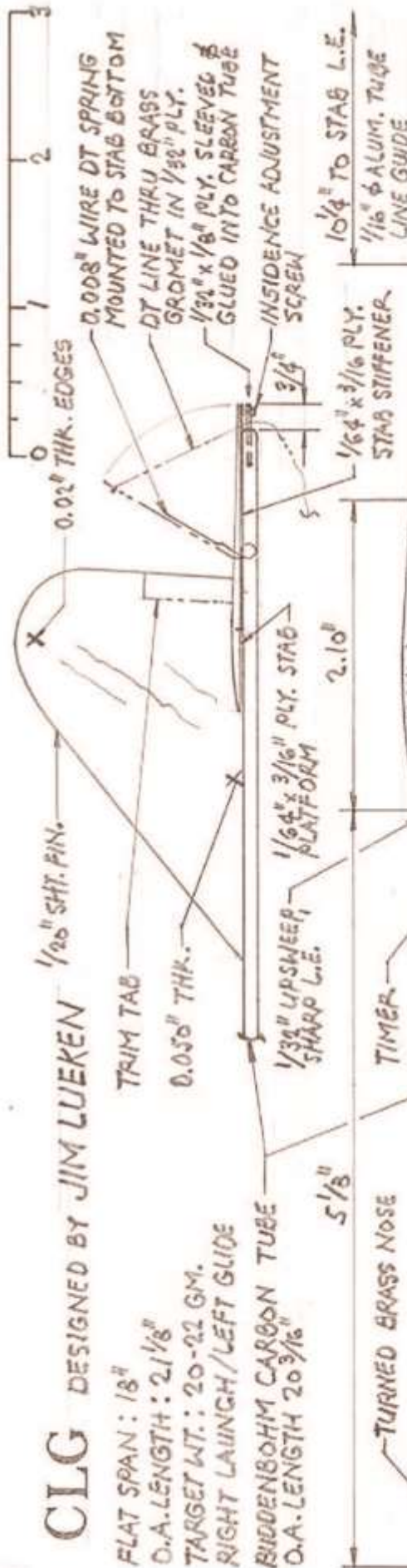
O.A. LENGTH: 21 1/8"

TARGET WT.: 20-22 GM.

RIGHT LAUNCH/LEFT GLIDE

BUDENBOHM CARBON TUBE

O.A. LENGTH 20 3/16"



modification to account for performance compared to the performance of other people in that competition and their position in the previous ranking (positive for beating people who were above them in the ranking, negative for beaten by people

below them in the ranking). The rankings will be updated to January 2022 when the results of the Israel December World Cup events will be incorporated. See <https://www.freeflightnews.org.uk/ranking/latest.htm>

F1A

1	Per Findahl	SWE	3205	0	-167	SP21=563 WB21=516-3 SB21=495-6 KZ21=0-133
2	Mikhail Kosonozhkin	RUS	3168	0	-143	EU21=553 NL21=136-60
3	Dusan Fric	CZE	3050	0	-145	WB21=491-3 ZE21=460-6 SP21=429-16 SB21=400-16 KZ21=296-36 HO21=0-70
4	Emmanuel Ragot	FRA	2904	4	267	PL21=525 EU21=400-13
5	Matija Hrast	SLO	2899	0	-1	SB21=553+10 WB21=441-3 KC21=153-40 CT21=0-13
6	Allard van Wallene	NED	2823	-2	-206	KZ21=560+6 WB21=0-66 EU21=0-76 SB21=0-80 SP21=0-140
7	Kosma Huber	SWE	2805	7	266	KZ21=506+13 SP21=490+10 ZE21=494+3 HO21=338-10 SB21=329-10 WB21=204-16
8	Jim Parker	USA	2696	1	96	SR21=452-3 MM21=369-6 KU21=174-13
9	Anton Gorsky	RUS	2691	-3	-148	NL21=466-6 EL21=305-23
10	Rudolf Holzleitner	AUT	2620	20	464	WB21=550+36 EU21=495+23 HO21=467+13 SP21=459+20 KZ21=443+16 ZE21=0-56 SB21=0-60 KC21=0-76

F1B

1	Mickael Rigault	FRA	3139	1	273	PL21=529 EU21=337-20
2	Mykola Kovalenko	UKR	3006	-1	-65	
3	Alexander Andriukov	USA	2865	0	36	EU21=538+3 MM21=520 SR21=404-6 KU21=388-6
4	Stepan Stefanchuk	UKR	2812	1	33	SP21=460 SB21=335-10 KZ21=263-10 WB21=260-10
5	Bernd Silz	GER	2811	1	62	ZE21=509+3 WB21=451+3 HO21=105-10 SB21=56-26
6	Albert Bulatov	RUS	2775	10	525	NL21=513-3 EL21=427-13
7	Ismet Yurtseven	TUR	2736	10	524	PS21=510 BU21=509 AL21=507 EU21=434 KC21=296-10 PR21=258-10 MD21=105-13
8	Adam Krawiec	POL	2590	-4	-207	WB21=387-6 SB21=381-10 ZE21=255-6 SP21=234-16 HO21=206-10 KZ21=0-56
9	Michael Seifert	GER	2577	0	68	KZ21=461+3 SP21=121-16
10	Timur Useynov	RUS	2550	48	1285	EL21=509+13 AM21=505 NL21=435+3

F1C

1	Mariusz Gasiorowski	POL	2930	0	-57	KZ21=507 SP21=0-10
2	Nikolay Rekhin	RUS	2914	0	-41	AM21=505 NL21=145 EL21=0-50
3	Yury Shvedenkov	CAN	2679	0	-76	
4	Volodymyr Sychov	SLO	2651	0	69	KC21=505 VS21=169-6 EU21=0-36
5	Viacheslav Aleksandrov	UKR	2384	0	-195	EU21=0-16
6	Darijo Jermol	CRO	2153	11	612	HO21=503 ZE21=503 KC21=0-6
7	Stanko Dobrev	BUL	2053	18	922	PS21=503 BU21=503
8	Roy Summersby	AUS	2043	-2	-209	
9	Vasil Zosimenko	UKR	2004	6	354	VS21=505+3
10	Erdenebayar Ulzii	MGL	1990	-3	-137	

F1E

1	Andre Trachez	FRA	3011	1	184	PM21=525 VL21=426-3 GV21=426-3 PE21=150-26
2	Alexander Winker	GER	2871	-1	-72	
3	Vojtech Zima	CZE	2751	1	5	RA21=324-10 RB21=223-13
4	Franciszek Kanczok	POL	2684	1	47	
5	Florian Winker	GER	2681	-2	-109	
6	Jakub Wisniewski	POL	2600	0	-1	
7	Jean-Luc Drapeau	FRA	2573	3	246	VL21=513+3 PE21=429-3 RA21=387 RB21=295-3 PM21=195-20 GV21=0-16
8	Stanislaw Kubit	POL	2536	0	-8	
9	Jaromir Orel	CZE	2497	-2	-79	RA21=260-10 RB21=78-16
10	Robert Sifleet	USA	2417	2	239	CA21=512 SI21=128-10 KO21=0-16

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Chronological order

BMFA 3rd Area Meeting, April 25			38/6
BMFA London Gala, Salisbury Plain, May 29-30			38/6, 51/8
BMFA Team Selection 2022, Salisbury Plain, June 11-12			49/8
BMFA 4th Area Meeting, June 20			51/8
Centennial Cup, Denver, USA, July 9			57/9
Swedish Cup, Alvaret, Öland Island, Sweden, July 9			48/8
Danish Summer Cup, Alvaret, Öland, Sweden, July 10			49/8
Harghita Cup, Deva, Romania, July 10-11			49/8

BMFA 5th Area Meeting, July 11			58/9
FF CRO Cup, Korenica, Croatia, July 24			56/9
FF Memorijal Darko Krajina, Korenica, Croatia, July 25			56/9
US FF Nationals, Muncie, USA, July 25-27			64/10
BMFA East Anglian Gala, Sculthorpe, July 31-Aug 1			59/9
Salonta Cup, Salonta, Romania, July 31-Aug 1			56/9
Szabo Miklos Memorial, Salonta, Romania, Aug 1			56/9
Hispano-Francia, St Jean de Sauves, France, Aug 9-10			63/10
Louis Dupuis 2 min France. August 9-10			64/10
Latvia Cup, Kharkov, Ukraine, August 13-14			57/9
Mongolian Cup, Ulaanbaatar, Mongolia, August 14-15			64/10
Asian Cup, Ulaanbaatar, Mongolia, August 14-15			64/10
Canada Cup, Tottenham, Ontario, Canada, August 14			64/10
BMFA Southern Gala, Salisbury Plain, August 15			66/10
BMFA F1E, Burrough, August 19-20			60/9
Governor's Cup, Toszek, Poland, August 20			65/10
Toszek Cup, Toszek, Poland, August 21			66/10
Friendship Cup of Ukraine, Toszek, Poland, August 22			66/10
51st Eifelpokal, Zulpich, Germany, August 27-29			64/10
BMFA Substitute Nationals, Salisbury Plain, Aug 28-29			67/10
BMFA Substitute Nationals, Salisbury Plain, Sept 4-5			81/11
			89/12
Prista Cup, Valchitran, Bulgaria, September 10-11			74/11
Bulgaria Cup, Valchitran, Bulgaria, September 11-12			74/11
6th Poitou Charentes F1E, Tourtenay, France, Sept 11			66/10
Poitou Moncontour F1E, Tourtenay, France, Sept 12			66/10
BMFA 6th Area Meeting, September 12			67/10
Viktor Stamov Cup, Chemigiv, Ukraine, Sept 16-17			74/11
Almaty Cup of Kazakhstan, Samara, Russia, Sept 17-19			74/11
Prista Cup F1E, Alekovo, Bulgaria, September 17-18			77/11
Bulgaria Cup F1E, Alekovo, Bulgaria, September 18-19			77/11
South Bohemian Cup, Vsechov, Czech Rep., Sept 18			65/10
Izet Kurtalic, Mostar, Bosnia-Herzegovina, Sept 18			65/10
57th Mostar Cup, Mostar, Bosnia-Herzegovina, Sept 19			65/10
West Bohemian Cup, Vsechov, Czech Rep., Sept 19			65/10
BMFA F1E, Burrough, September 25			68/10
Hogo Cup, Zabokreký nad Nitrou, Slovakia, Sept 25			74/11
VL Rhone-Alpes/Philippe Lepage, Arzay, France, Sept 25-26			74/11
Zabokreký Cup, Zabokreký Nitrou, Slovakia, Sept 26			75/11
11th Volare Lessini, Monti Lessini, Italy, October 3			77/11
BMFA 7th Area Meeting, October 3			89/12
Max Men California Cup F1E, Lost Hills, USA, Oct 5			77/11
Kotuku World Cup of NZ, Lost Hills, USA, Oct 8-10			76/11
Anatolian Free Flight Cup, Golbasi, Turkey, Oct 8-10			75/11
Coupe Europa, Salisbury Plain, October 9			77/11
KarTel Cup, Pieter de Boer Mem, Kietrz, Poland, Oct 9			75/11
SPZG Cup Antoon van Eldik Mem, Kietrz, Poland, Oct 10			75/11
Rana, Czech Republic, October 9-10			76/11
15th Trofeo Citta di Capannori, Italy, Oct 9-10			76/11
Sierra Cup, Lost Hills, USA, Oct 9-11			76/11
Sierra Cup, Lost Hills, USA, October 11			77/11
Kotuku World Cup of NZ, Lost Hills, USA, October 12			77/11
Max Men, Lost Hills, California, USA, October 16			88/12
BMFA 8th Area Meeting, October 17			90/12
Krka Cup, Sentjerne, Novo Mesto, Slovenia, Oct 23-24			88/12
Midland Gala, October 30			90/12
Eurofly, Mühlenthurnen, Switzerland, October 30-31			88/12
Herend Cup, Tapolca, Hungary, November 6-7			89/12
La Grande Coupe de Birmingham, N Luffenham, Nov 7			90/12