FREE FLIGHT news

CONTENTS

F1Q Development Part 2	12	MILVUS F1G by JAN VODICKA	16
FAI Identification Number	15	BMFA Free Flight Championships 2016	18
FAI Free Flight World Cup	15	Salisbury Plain	18

FFn DIARY

February 11-13 Lost Hills, California, USA	Kiwi Cup of New Zealand. F1A F1B F1C F1P F1Q F1E. World Cup event. Contact: Roger Morrell, tel: +1 310 483 8776, email: r_morrell@yahoo.com For the 3 February Lost Hills events: http://sen.faifreeflight.org/index.php/fab-feb-information
February 15 *Lost Hills, California, USA*	*North American Cup. F1A F1B F1C F1P F1Q. World Cup status to be confirmed. Contact: Tony Mathews, tel: +1289 316 2990, email: tmathews180@gmail.com*
February 16-20 Lost Hills, California, USA	Bob White Max Men International. F1A F1B F1Q F1C F1G F1S F1H F1J F1P F1E. World Cup event. Contact: William M Booth, tel: +1 760 889 3201, email: booth@boothsuarez.com
February 19 Area Venues	BMFA 1st Area. F1A (SMAE), F1G (Plugge), C/P (White), E36 (Plugge), Mini Vintage (Plugge). Contact: Area Comp Secs.
February 25 Viabon, France	14th Criterium Philippe Lepage. F1B. World Cup event. Entry fee: €35. Contact: Jean Pierre Challine, tel: +33 6 1195 57 11, mjp.challine@sfr.fr acgalichet@orange.fr
February 26 Nova Pazova, Serbia	8th Koplas Pro cup. F1N. Contact: Martin Grubic, tel: +381 638 658 182, email: martin.grubic@yahoo.com web: http://www.aknovapazova.org.rs
March 5 Area Venues.	BMFA 2nd Area. F1H, P30 (Plugge), F1J (Plugge), BMFA 1/2A, CE (Plugge), HLG-CLG Contact: Area Comp Secs.
March 10 Sakylan Pyhajarvi, Finland	Swedish Moose Cup. F1A F1B F1C F1Q. World Cup event. Contact: Per Findahl, Sweden, tel: +46 223 22 957, email: per.findahl@gmail.com web: http://www.norbergsfk.se
March 11-12 Säkylä, Finland	Bear Cup. F1A F1B F1C F1Q F1A. World Cup event.. Contact: Kim Henriksson, tel: +35 844 768 8370, email: kim.henriksson@vahanen.com web: http://www.lennokkipojat.fi
March 14-17 Slanic Prahova, Romania	FAI F1D European Championships for Free Flight Indoor Model Aircraft. web: http://www.frmd.ro
March 18 Gjovik, Norway	Holiday on Ice. F1A F1B F1C F1Q. World Cup event. Contact: Tor Bortne, Jernbanev 28, 2840 Reinsvoll, 0179 Oslo, Norway, tel: +47 920 95 329, email: tobortne@bbnett.no web: http://frifluktvegar.no
March 26 Area Venues.	BMFA 3rd Area. Vint' G (Plugge), C/R (Gamage), F1C (Halfax / Plugge), F1Q, HLG-CLG (Plugge). Combined Power. Contact: Area Comp Secs.
April 8-9 Deva, Romania	Harghita Cup. F1A F1B F1C F1P F1Q F1H. World Cup event. Contact: Kiss Istvan, tel:+40 7451 61435 /+40 735231 169 ktamara@netter.ro cc.cristur@gmail.com web: http://www.fai1abc.com
April 8-9 Föhrlberg, Oberkotzau, Germany	Apr 8 Otto Kuttler Cup, Apr 9 Föhrlberg Cup. F1E. Contact: Peter Kuttler, tel: +49 160 945 16 469 / +49 928 66 187, email: peter-kuttler@web.de
April 14-18 Nalchik, Russia	Naloev Cup. F1A F1B F1C F1P. World Cup event. Contact: Nikolay Naloev, Russia, tel: +7 928 084 44 79, email: naloev@mail.ru
April 14 (Good Friday) North Luffenham	BMFA Northern Gala. C/G (CMA), C/R (Caton), B/P (Hamley); [Club Champs], C/E, SLOP (Falcons), F1H, P30, BMFA 1/2A, Mini-Vintage, HLG-CLG. Contact: G Warburton 0113 2852947 gwarb@aol.com
April 17 (Easter Monday) Salisbury Plain	Croydon Wakefield Day. F1B, 8oz Wakefield, 4oz Wakefield, Marcus Lightweights (RAFF V, Bazooka, Dinah-mite, Supa Dupa). Contact: Ray Elliott, tel 0208 997 7745 ray.elliott8@btinternet.com
April 23 Peak District or near Melton Mowbray	BMFA 1st F1E (Team Selection). Contact: Ian Kaynes 01252 512538 or 0794 185 2144

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Web site address: www.freeflightnews.org.uk
Compiled and produced by Ian Kaynes, Paul Masterman and Michael Warren

F1Q DEVELOPMENT PART 2

By Ian Kaynes

This continues from my article in November FFn. At that time it had been planned that the second part would contain details of one of the 2016 models and a description of future plans. I can do the first part but I am still unsure about the future direction! I have looked at geared motors, from which others get very good performance, but my analysis does not indicate that they would lead to a big improvement. Anyway, I have ordered one and will make tests before deciding on that direction.

A large plan of Q161 and a detail fuselage drawing are included here.

The structure of the wing follows the style of some of my F1E gliders but sizes and sections are completely different. The wing is based on a Dbox with blue foam core, which I make with a decidedly low tech approach (no NC moulds, vacuum bags or autoclaves). I find it lighter and quicker than building a frame of balsa ribs and covering with a purchased carbon shell.

I hot wire the foam to upper surface and then lower surface using templates shaped from aluminium L-section. The balsa leading edge is stuck on, then the rear of the foam is cut back to the exact chord required – this is necessary because the foam is always cut over size in the chordwise direction so that the cut-away upper and lower surface parts of the original foam block have a chord greater than the Dbox including the spar for when they are used later to form a mould.

The spar caps are cut from carbon sheet and the core from balsa which is planed and sanded to match the spar width. The lower spar is epoxied to the balsa then, with the upper spar taped under the lower spar, the top surface sanded down to the required height for the section and a good fit to the foam core. The upper spar is then stuck on and, on the inner wing spar, the main joiner is fitted. I use dural arrow shafts of a size (1714) chosen to be a good fit on the 5mm carbon joiner. The joiner is fitted between tapered wedges on the inside of the upper and lower spars to give the required dihedral angle. Kevlar thread is then bound round the complete spar to cover for transverse stresses against which the lengthwise–grain balsa core is particularly poor. Pitch of the thread is about 1mm near the root increasing to 3 or 4mm further out.

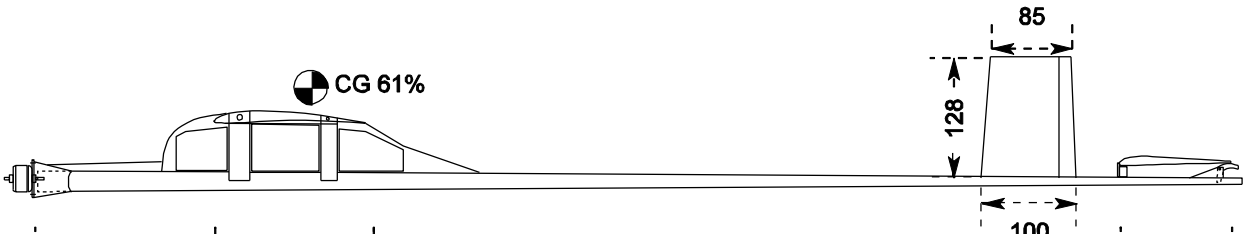
The completed spar is then stuck to the foam core and it is ready for covering with carbon. I use Mike Woodhouse's 93g/m^2 carbon cloth which is cut allow a slight overlap on wrapping round the Dbox from one spar to the other. Photomount is sprayed on the foam–spar assembly and it is rolled across the prepared carbon cloth to attach it. The upper and lower surface moulds have stops stuck to them to locate behind the rear of the spar and are covered with polythene. The Dbox is placed on the lower surface mould. Epoxy (Easy Composites) is spread on the upper surface carbon and rolled with a sponge mini paint roller for even and minimum distribution, weighing to check the added weight. When the top surface and leading edge are satisfactory the upper surface mould is placed over it, turned over and the lower surface epoxied in the same way (I use a spreadsheet of weights of the core, the carbon and the moulds to keep track of the added weight at both stages). The lower surface mould is then placed back on to the Dbox and the moulds held together with masking tape. When a pair of Dboxes are completed they are put in my clamping system of two boards with some stiff padding and a lot of ¼" bolts - effectively a heavy duty flower press.

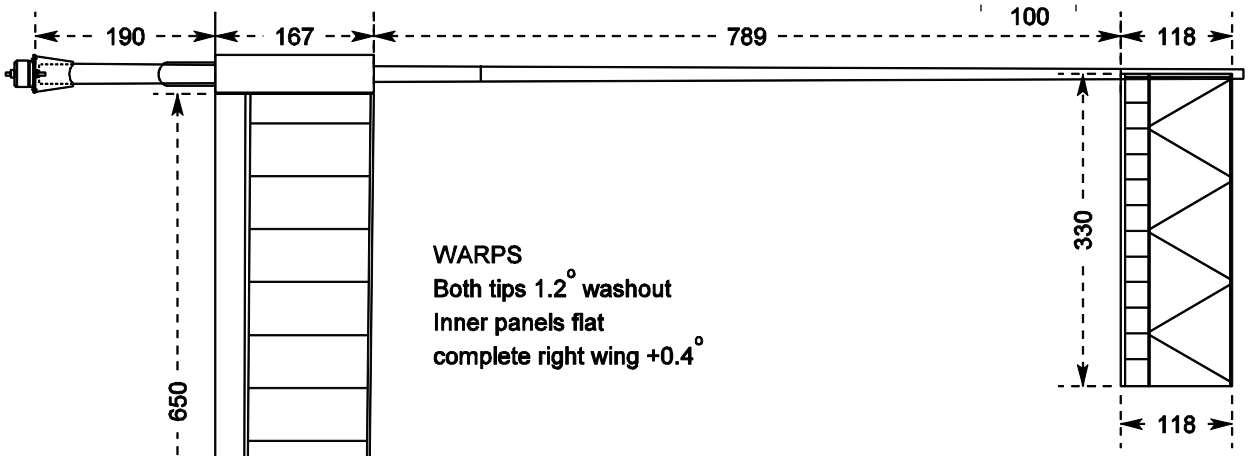
When the Dbox comes out of the clamp and the mould it is necessary to trim the excess carbon behind the spar. I use a sharp knife to run along the edge of the spar, but it must be done carefully to avoid cutting the exposed Kevlar thread spar binding. Previously, I used to stick 1/32" balsa on the top, bottom and rear of my spars so that the top and bottom could be sacrificed by partial sanded to get a flush fit with the foam and the rear to protect when cutting the excess carbon. While sacrificial components figure in making F-35 the right shape, I decided it was too heavy for my models and I now aim for a better direct fit with the foam and to take care when trimming the carbon.

I shape my wing ribs from block balsa shaped to templates of wing sections at root and dihedral, or dihedral and wing tip. A dummy spar and trailing edge are lightly stuck to the rib blank, then unidirectional carbon is epoxied to the blocks (either 0.13mm or 0.18mm thick carbon). While curing these are clamped between foam moulds, then sliced to about 2mm width with a diamond saw. The ribs and trailing edge are stuck to the Dbox on a lower surface foam mould and a plan plotted on transparency (for easy reversal to suit right or left tapered panels). My current covering on F1Q is Fibafilm on the inner panel upper surface, Icarex on the tip panel upper surface, and 15 clear mylar under the whole wing.

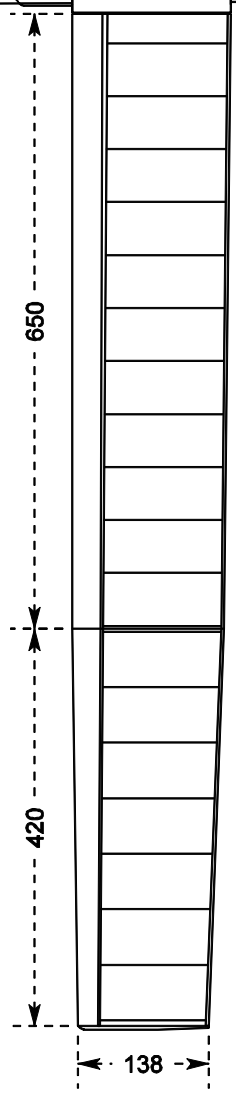
The fuselage tube is a single-piece tube made for F1E by Jaromir Orel. When I collect them from him I have to cut down the length by about 100mm to fit in my F1E box, cutting this from the thick end and basically that determines the length of my fuselage. The wing centre section is a sandwich of 0.8 ply, balsa and 2mm lime. This is spaced so that the lime ribs are stuck directly against the 2mm lime front and rear verticals which link the wing to the fuselage. An 5x5 aluminium block is used as the locator for the rear joiners and this is bolted to an L section support on the side of the rear vertical, allowing incidence adjustment of each wing by inserting or removing shims under the blocks. The motor is mounted on an aluminium bulkhead supported by thin ply and epoxied to the front of the fuselage with a balsa filling block inside the front of the fuselage. Tapered block balsa fairings support the rear of the edges of the bulkhead and a band of glass fibre or carbon cloth wrapped round from one side, round the bulkhead and back to the other side.

I use New-Power XL-09HMB servos for both tail and rudder control On this model they are mounted behind the wing, which has pushed the CG back and required a rather long nose. The servo horns are linked to a clevis and that is screwed to a threaded coupler which is soldered to a length of 0.8mm piano. This wire extends to the inside of the tube, at which point it is epoxied into a 2mm carbon tube. Near the tail this tube has another piece of 0.8 wire epoxied into it. This completes the linkage to the rudder via a fuselage exit hole to engage a horn at the base of the rudder. For the tail the pushrod continues down the length of the fuselage and engages in the downward part of a 1mm aluminium crank. This is pivoted between 2 supporting pieces of 0.8mm aluminium which sandwich 2mm lime core. A spring loaded hinged hook on the top of the tailplane trailing edge engages the crank and hold the tailplane down into the crank. A small length of aluminium tube is epoxied under the rear edge of the tailplane trailing edge to make for smooth movement as the crank moves.





WARPS
Both tips 1.2° washout
Inner panels flat
complete right wing +0.4°

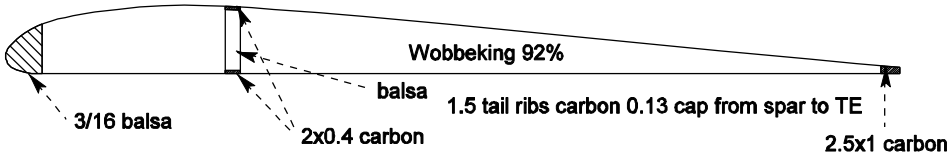


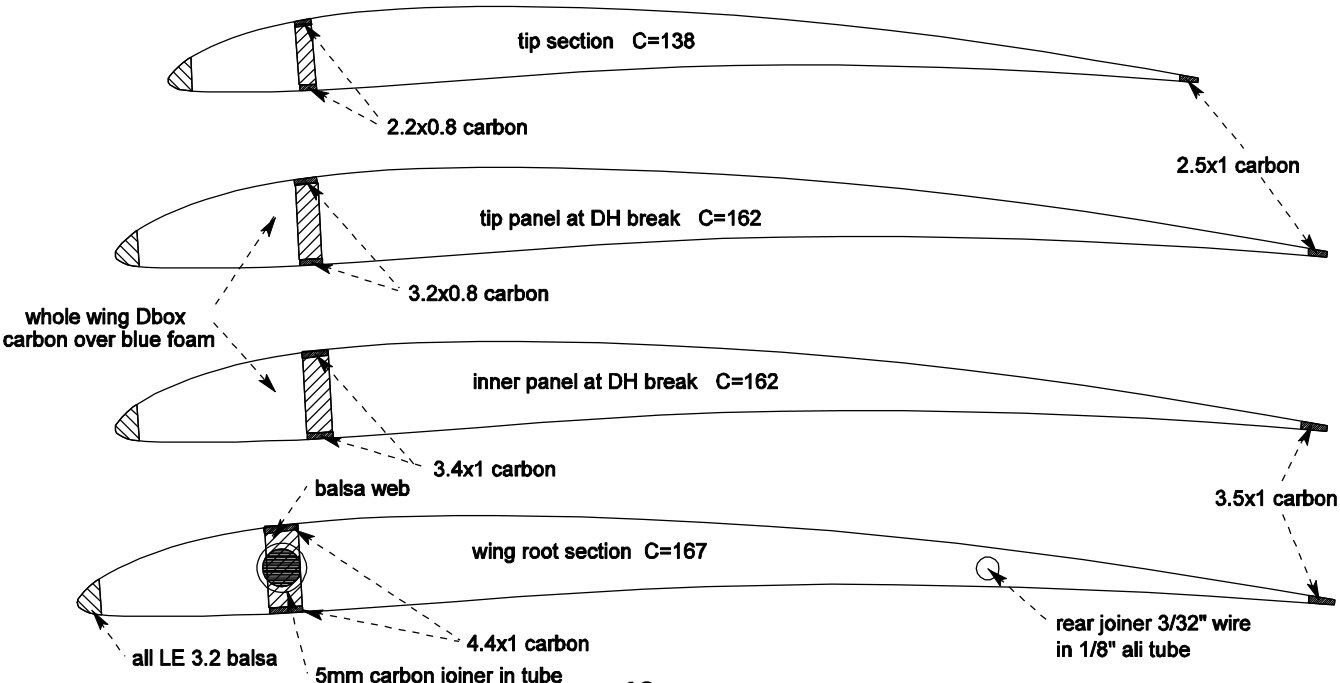
wing area	33.9 dm^2
tail area	7.8 dm^2
CG	61%
mass	490g

Q161
F1Q by Ian Kaynes

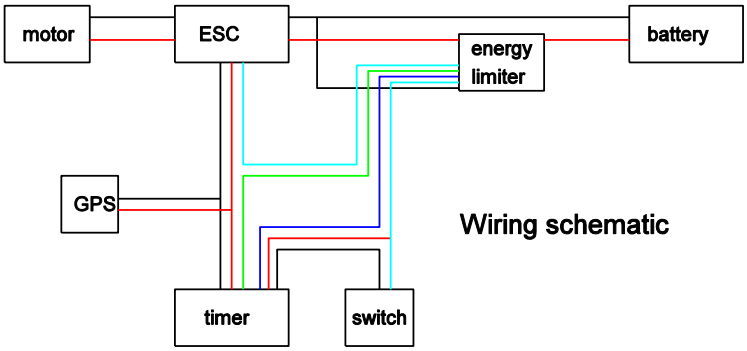
FFn Scale 1:8 All dimensions mm

DIHEDRAL
1.85° inner panel (21mm at DH)
17.04° tip panel (110mm at tip relative to inner panel)





The motor is a Scorpion SII 2205-1490KV motor (this is a correction of the descritpion in November FFn) drving a Graupner 8.5"x4" folding prop and the battery a Hyperion G3 CX-25C 2S 850mAh. The ESC is the 12A basic one from Robotbirds. The energy limiter is to the Dick Ivers design which I bought from Andras Lindner when he made some , but he has now stopped making them, so I am now going to try the Sidius limiter. The Black Magic F1Q timer, the Icare2 GPS unit and a switch complete the system as shown in the sketch:

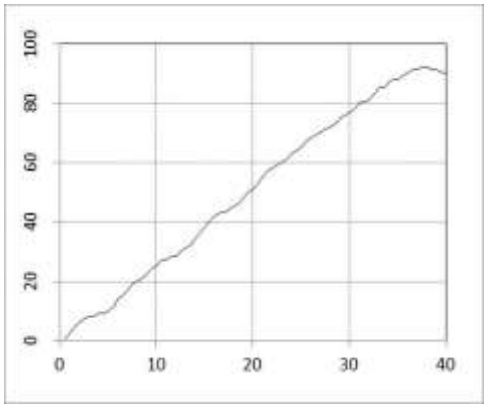


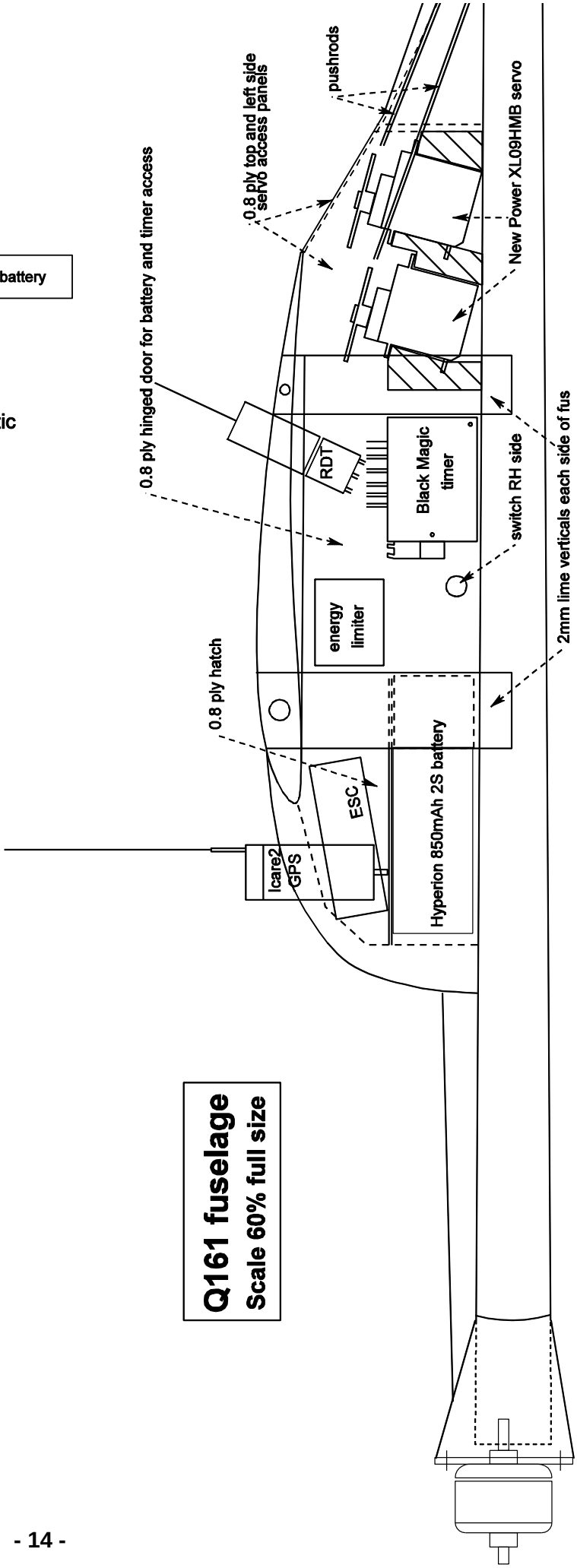
Wiring schematic

Measured on the ground the current during the run varies from about 8.3A at the start of the run down to about 7A at 35 sec, power going down from 61W to 52W. Power measurement would give a run of 35 sec, but the energy limiter usually reaches limit in the air about a 1 or 1.5 sec later. Although the energy limiter tells the timer when it cuts the power, I find transition is smoother if I have the timer slowly stopping the motor from 35.5 sec to have fully stopped it 2 seconds later, with the energy limiter cut coming at some stage during this run down. The thrust measured on the ground varies from 3.85N at the start down to 3.4N, which is slightly more than my analysis predicts – but my major difficulty in modelling is in the resistance of the battery, ESC and motor.

The wing is at 2.3°. The trim setting on the tail at launch is -1.9 ° (i.e. trailing edge up), after 3 sec it drops to -1.85 ° and then drops in two more stages during the climb to reach -1.65 ° at the start of shut down. During transition it moves to the glide setting of -1.2 ° (yes, inexplicably the trailing edge is lower on the glide than on the climb). Meanwhile the rudder is at 3.4 ° left on launch, goes to 3 ° left after 3 seconds and stays there for the test of the run, until moving to the glide setting of 3.3° right during transition.

The trim settings have been developed by a trial and error basis to get an apparently consistent trim on the climb. However, the altimeter record shows the climb is not that steady, particularly with a step at 4 to 5 sec The initial trim changes at 3 sec obviously need some tuning.





FAI IDENTIFICATION NUMBER

The FAI identify every sporting licence holder with a unique FAI identification number. Whenever your sporting licence is renewed your FAI ID stays the same for ever. The national body issuing the licence is responsible for entering the information on the FAI database. You can check the basic information and get the FAI ID number from the FAI website:

http://www.fai.org/about-fai/fai-sporting-licences

Use access code Pwij3dkD to check the licence status and FAI ID number for any name that matches a string of at least 3 characters that you enter.

The validity of a sporting licence for Championships, etc, is now confirmed via the FAI database rather than the physical licence. It also makes it much easier for me to identify people in World Cup

The FAI ID number may also be used as the number on models as an alternative to the sporting licence. I will push for it to remain as an option to use either one or the other for as long as possible, but it will probably end up as FAI ID number as the only number on models.

FAI FREE FLIGHT WORLD CUP

Report and statistics following the results included in January FFn.

The total number of participants was 5479, an increase over last year There were two competition cancelled this year, the Mura Cup of Slovenia and the Siscia Cro Cup because of flying field problems at Krbava In Croatia which was the venue for both events. The Tui Cup F1E competition was not flown because of high winds for most of the day and it was considered unsporting to fly the small number of rounds which might have been possible in the evening.

The winner in F1A is Borislav Bardarov of Bulgaria with four victories in events this year. He was followed by Jes Nyhegn of Denmark with three wins and a second place and 18 bonus points. In third place was Mikhail Kosonozhkin of Russia (winner in 2011, 2012 and 2013) with the same places as Nyhegn but only 15 bonus points.

The F1A-Junior victor also had four wins and was followed by second and third places with three wins and a second place, the flyers involved being Luca Aringer (Austria), Mikhail Lomov (Russia) and Vitek Roddler (Czech Republic).

The top five flyers in F1B all had at least 4 victories in their results The bonus points gave Albert Bulatov (Russia) victoryin front of Oleg Kulakovsky (Ukraine) and Alexander Andrjukov (USA).

The F1B Junior title has been retained by last year's winner Bojan Gostojic (Serbia) followed by Jackel Sebastian (Germany) and then Dawid Lipski (Poland) who finished in third place in 2015 and won in 2014.

The winner of F1C is Artur Kaitchuk (Russia), the current European Champion, with four victories. He is followed by Voldymyr Sychov (Slovenia, the 2014 winner) and in third place is Roy Summersby (Australia), both with three victories and a second place.

F1P Junior was won by Ilia Trapeznikov (Russia) who moved into the lead with a victory in Israel in December. This moved Daniel Bogomaz (Poland) down to second place, also with four wins. Elizaveta Klimakiova (Russia) moved up to third place with a first and a second in the final events in Israel.

F1Q has the first two places as a repeat of the final positions last year - Gabor Milak (Hungary) first place with four wins and Ian Kaynes (United Kingdom) second with three wins and a second place. Third place was taken by Ron Assmuss of Germany with one win and three second places.

For the first time since 2012, when the number of events counting was increased to four, the F1E event was won by a flyer with four victories - Marian Popscu of Romania. Not only that, it was closely fought by Alexander Winker (Germany) who also had four wins and had been in the lead until Popescu won one of the competitions at the final event in Bulgaria to put Alex into second place. Third place was taken by Ian Kaynes (United Kingdom) with two victories and a second and third place.

The winner of F1E Junior was Ema Mozuchova of Slovakia, second was Florian Winker (Germany) and third place Dorobantu Hariton (Romania).

The top three places in each event have been displayed on the FAI web site and updated frequently throughout the year at the address:

www.fai.org/ciam-events/world-cups/101-ciam/35330-f1-free-flight-world-cup-rankings

The detailed results have been uploaded to the coordinator's web site and there are links to this from the FAI web page for both the results of each class or the overall summary, the index to the results of all the years of World Cup is at

www.freeflightnews.org.uk/wcup/wcupmast.htm

Statistics

The individual events F1A, F1A-Junior, etc show the numbers relevant to that event. The column headed ALL is the total of number of competitors in the full events (F1A B C E Q) which takes account of the fact that juniors have also been included in the results of the full event.

F1	A	A-J	B	B-J	C	Q	P-J	E	E-J
No. competitions	62	47	62	43	58	27	17	21	18
Total number of entries	2065	328	1327	150	587	149	70	739	150
No. competitors scoring points:									
in 1 event	174	42	108	19	40	13	5	46	12
in 2 events	88	24	41	11	31	8	2	21	6
in 3 events	40	5	33	3	21	6	1	11	2
in 4 events	28	5	19	2	5	1	2	7	2
in 5 events	11	4	9	2	6	3	0	6	2
in 6 events	18	1	8	1	5	1	1	3	0
in 7 events	5	1	7	1	3	0	2	7	1
in 8 events	6	0	2	0	3	0	0	3	2
in 9 events	3	1	3	0	1	1	0	4	1
in 10 events	1	1	2	1	1	0	0	1	0
in 11 events	2	0	2	0	0	0	0	2	0
in 12 events	0	0	2	0	0	0	0	0	0
in 13 events	1	0	0	0	0	0	0	1	0
in 14 events	0	0	1	0	0	0	0	0	0
in 15 events	1	0	0	0	0	0	0	0	0
in 16 events	0	0	1	0	0	0	0	0	0
In 17 events	1	0	0	0	0	0	0	0	0
In 18 events	0	0	1	0	0	0	0	0	0
Total number of competitors scoring World Cup points	379	84	239	40	116	33	13	112	28

Number of competitors per country, only those scoring points in 2 or more events:

F1A		F1A Junior		F1B		F1B Junior		F1C		F1Q		F1P Junior		F1E		F1E Junior		All	
RUS	40	RUS	7	RUS	33	RUS	7	RUS	29	HUN	5	RUS	6	ROU	12	FRA	5	RUS	113
GER	14	SVK	4	USA	12	BUL	2	UKR	8	GER	4	POL	1	FRA	10	ROU	5	FRA	36
ISR	13	SLO	4	UKR	9	POL	2	POL	5	DEN	3	USA	1	POL	10	GER	2	GER	36
FRA	12	FRA	3	FRA	8	USA	2	GBR	4	GBR	2			GER	8	SVK	2	POL	33
SLO	9	HUN	3	GER	8	SRB	2	ISR	4	UKR	2			AUT	5	CZE	1	UKR	30
UKR	9	MGL	3	POL	7	EST	1	USA	4	FIN	1			CZE	5	POL	1	USA	27
HUN	8	POL	3	ISR	6	FRA	1	FRA	3	ISR	1			ITA	4			ISR	25
SVK	8	ROU	3	CZE	4	GER	1	ITA	3	POL	1			SVK	4			ROU	20
BIH	7	BUL	2	GBR	4	ISR	1	AUS	2	USA	1			SUI	4			CZE	16
CZE	7	CZE	2	AUS	3	LAT	1	CRO	2					USA	2			HUN	15
USA	7	ISR	2	FIN	3	UKR	1	SLO	2					GBR	1			GBR	14
BUL	6	AUT	1	LAT	3			AUT	1					UKR	1			SVK	12
DEN	6	BIH	1	NOR	3			BUL	1									SLO	12
FIN	6	FIN	1	SRB	3			CAN	1									AUT	10
MGL	6	GER	1	CAN	2			CHN	1									FIN	10
SWE	5	GBR	1	CHN	2			EST	1									SRB	10
SRB	5	UKR	1	CRO	2			GER	1									BIH	9
AUT	4			LTU	2			HUN	1									DEN	9
NED	4			MGL	2			LAT	1									MGL	9
POL	4			SWE	2			MGL	1									BUL	8
ROU	4			TUR	2			SRB	1									ITA	8
TUR	4			BIH	1													SWE	7
GBR	3			HUN	1													AUS	6
CAN	2			ITA	1													CRO	6
CRO	2			JPN	1													TUR	6
MKD	2			KAZ	1													CAN	5
ARG	1			MKD	1													NED	5
AUS	1			NED	1													SUI	5
EST	1			NZL	1													LAT	4
NZL	1			ROU	1													NOR	4
NOR	1			SLO	1													CHN	3
ESP	1			MNE	1													EST	3
SUI	1																	MKD	3
IND	1																	LTU	2
																		NZL	2
																		ARG	1
																		JPN	1
																		KAZ	1
																		ESP	1
																		MNE	1
																		IND	1

MILVUS F1G BY JAN VODICKA

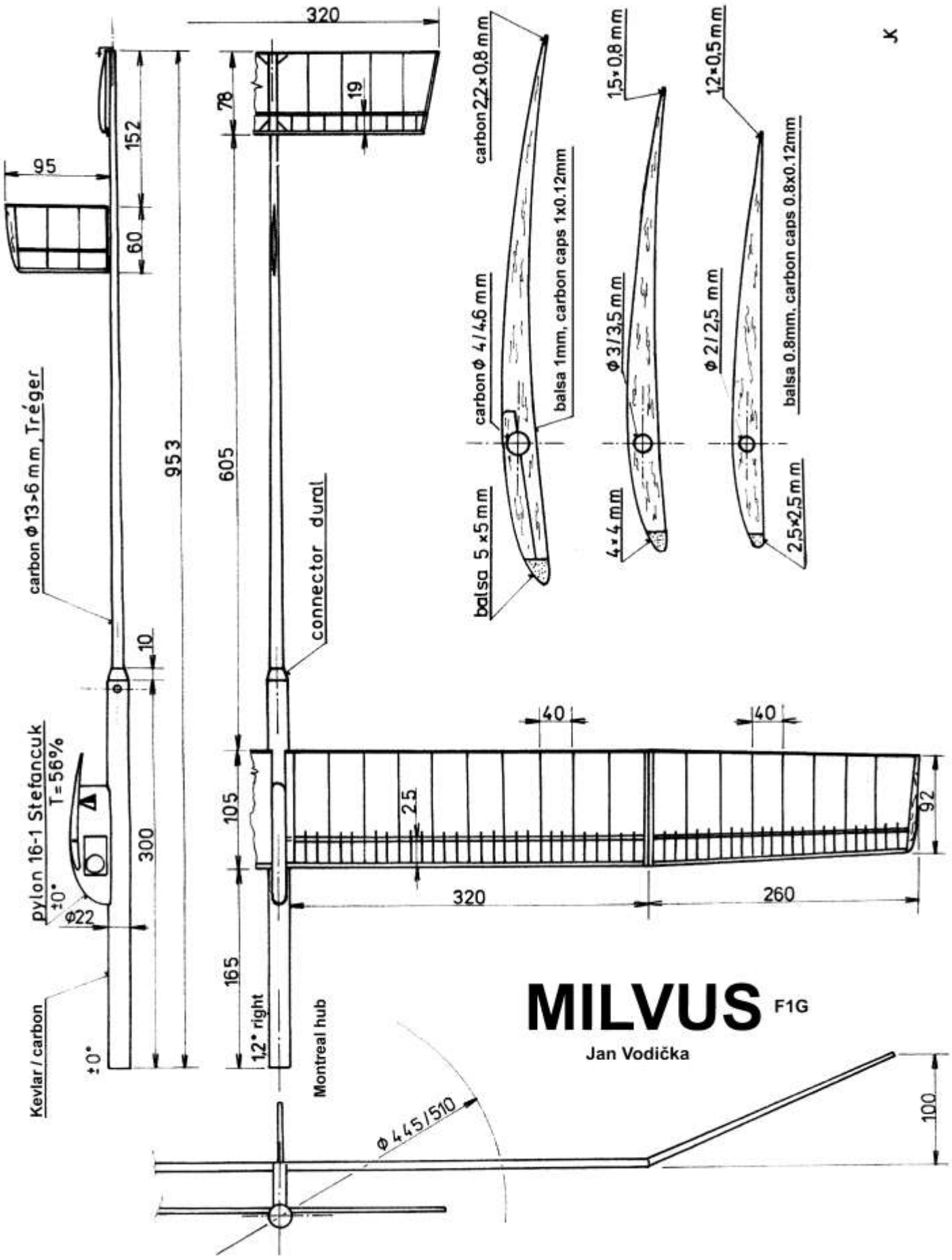
From Volny Let with thanks.

The fuselage has a diameter of 22 mm and is made from one layer of Kevlar and a single layer of carbon cloth by Tomas Marsalek. The boom is by Ivan Tréger and quality is second to none. Originally it was connected to the fuselage connected with a carbon cone made myself. In the winter of 2016 I made a joiner from duralumin and the boom can now be removed from the fuselage, useful when there is a broken motor to remove from the tube. The pylon is from Stepan Stefančuk, catalogue number 16. Equipped with a timer it weighs 13 grams. Starting timer and propeller is combined into a single lever.

The wing is built on the tubes which I produce from carbon sock. Dimensions are on the plan. The trailing edge is unnecessarily oversized, a sufficient thickness would be about 0.5mm. The tips have the same construction with a Marsalek tube. However, today I would use 3 / 3.3mm. The weight gain is in the order of hundredths, but the torsional stiffness due to the larger diameter tubeis substantially higher. The spar could also be omitted and the leading edge applied directly, such as used by Evgeny Gorban.

The tail has a spar tube of 2/2.5mm

The covering of the model is from mylar, the wing with Cubenfiber weighing 11 g/m^2.


320
78
19
152
95
60
953
605
carbon Φ13×6 mm, Tréger
carbon 2,2×0,8 mm
carbon Φ 4/4,6 mm
balsa 1mm, carbon caps 1x0.12mm
balsa 5×5 mm
1,5×0,8 mm
Φ 3/3,5 mm
4×4 mm
1,2×0,5 mm
Φ 2/2,5 mm
balsa 0.8mm, carbon caps 0.8x0.12mm
2,5×2,5 mm
connector dural
10
40
40
105
2,5
92
pylon 16-1 Stefancuk
T=56%
±0°
Φ22
300
320
260
165
1,2° right
Montreal hub
Kevlar / carbon
±0°
MILVUS F1G
Jan Vodička
Φ 445/510
100

The hub is my own production of Montreal stop type and it allows launching without holding the propeller. A description and sketch of the head can be supplied, but if you do not have enough time and quality machinery, it is better to buy from one of the Ukrainian producers. The blades are very lightweight 3mm balsa, outlined with 1x1 mm lime of the ;eading edge and 0.5x0 5 at the trailing edge, moulded on a former and coated with glass fabric. They are equipped with holders from Stepan, Cat 02/03/15 threaded M4x0, 5 and locking bolt, which enables very easy replacement and adjustment of the leaves on the field.

BMFA FREE FLIGHT CHAMPIONSHIPS 2016

		1st A	2nd A	NG	3rd A	Lond 1	Lond 2	F1E	Nats 1	Nats 2	Nats 3	4thA	F1E	5th A	6th A	E.Ang 1	E.Ang 2	F1E	SG	Scul	7th A	8thA	Mid G	Total
1	P Ball		9	18	5	5	5		11		15	6			12					4.33	18	9	4	121.3
2	S Willis	1		6	9		7		9	3	2	18		1	13	12				5.33	7	5	15	113.3
3	C Foster	9	2.5	13	4.5				3	3	6	3			10	12	11		6	2	6		12	103
4	D Cox	5	1	2	10	9				6	3	4		3	6	6	6		3	6.33	4	9	2	85.33
5	P Watson	4	9	6	6	2	6		12		4	1		4	1	6	3				6		9	79
6	F Rushby			10						18	5	1		9	11	4	9					2	9	78
7	T Grey		6		1	5	3		7	4		1		11	9		6				4	3	6	66
8	J Cooper		9	9			2			9	6	6		6	6								6	59
9	C Strachan	2	4	9	2				6	3						5	4				12	9	2	58
10	P Woodhouse			3	12.5				9	4		6				4	4				2	4	4	52.5
11	A Jack			6	9	3			10	5	3	6									2		4	48
12	I Clarke		3	6	9					9						6					5		9	47
13	P Tolhurst	1	2	4			3		9	4	7.5	10		1	4									45.5
14	C Redrup	9	4	9		1			1					9									8	41
15	P Adams			9						9		3.3			6	4				4		2	2	39.3
16	G Hart	6		6	2									9		9	6					1		39
17	C Parry		4	1		3	3				6			4		5	9		3					38
18	A Moorhouse		1		6	1	4			1	3				4	1	4			6	2	1	3	37
19	R Vaughn	9			2	2	3					9		1							9			35
20	S Barnes		2.5	11					6			1											13	33.5
21	R Jack			8		2	4		9			4											3	30
22	J Carter	9		9					3	6					2									29
23	A Brocklehurst				2						9			9										26
23	G Madelin			8			9																9	26
23	S Philpot							6	2		4		1			3	9	1						26
23	G Stringer					6			10	6	4													26

SALISBURY PLAIN

From Peter Watson. BMFA FFTC Area 8 Liaison.

I am pleased to say that Area 8 Salisbury Plain is available for Free Flight in 2017. The military authorities have confirmed all the bookings applied for, which covers every Saturday and Sunday, from February to November, plus Easter Monday. This is of course, subject to any possible future cancellations.

To use this facility for sports flying/trimming, you must have an annual users permit. This is issued by the BMFA office. Apply through donna@bmfa.org or by phone/letter to the office, for the necessary forms. The conditions of use, the code of conduct, the undertaking, and the fee remain the same as in 2016.

The permit is for sport flying/trimming on any of the available dates. Under the terms of the licence granted to the BMFA, we are charged per flyer/day, but the charge per contest flyer/ day is higher than that for a sport flyer/trimmer day. This is an odd situation which I hope to re negotiate when the licence is renewed. On scheduled contest days only, non permit holders may fly, on paying a 'field access fee'.

To partially alleviate these anomalies, anyone entering a contest will have to pay a 'field access fee', whether they hold an annual permit or not. Permit holders can sport fly/trim without further charge on these contest days, but must pay the fee if entering a contest.

The exceptions to the above are for competitors only, at the London Gala, Southern Gala, Stonehenge Cup, and Equinox Cup, for which the contest entry fee, or if applicable a BMFA Free Flight Season Ticket, also covers the 'field access fee'.