

FREE FLIGHT

News

CONTENTS

Building a Wing the Allnutt Way - Kind Of	96	FAI Free Flight World Cup	100
Kaptein Darling 1 and 2, F1As by Per Findahl	96	BMFA 1st Team Selection, Salisbury Plain, Sept 11-12	100
FF CRO Cup, Krbava, Croatia, Aug 28-29	96	Southern Gala, Salisbury Plain, Sep 4	101
Huron Cup, Borden, ON, Canada, September 4	96	Coupe League 6th Round - Southern Gala	101
Canada Cup, Borden, Canada, Sept 5	99	BMFA Senior Championships	101
Bulgaria Cup, Pazardzik, Bulgaria, September 17-19	99	Open Rubber League	101
Toszek Cup, Toszek, Poland, Sept 11	99	Noticeboard	101
Governor's cup, Toszek, Poland, Sept 12	99	NFFS Symposium Report 2010	102
F1E at Tourtenay, France Sept 25-26	99	BMFA Free Flight Forum	102

FFn DIARY

October 2-3 Salisbury Plain	BMFA Trimming Weekend. See FFn 1002 Must call Peter Tribe on Friday before 01225 862748.	October 30-31 Arzay - Bossieu, France	6th Philippe Lepage. F1A F1B F1C World Cup event, F1G. Contact: Jean-Pierre Challine, 13, chemin des Chêneaux, 91220 Bretigny sur Orge, France, tel+33 1 69 88 89 12, email: mjp.challine@sfr.fr, web: http://aeromodelismeromans.com
October 3 near Sheffield	BMFA 6th F1E. Contact: Ian Kaynes, 01252 512538	October 30-31	BMFA Salisbury Plain. See Oct 2-3 entry.
October 8-10 Tass, Hungary	26th Puszta Cup. F1A F1B F1C F1Q World Cup event, F1G, F1H. Entry fee €30. Contact: György Pinkert, Pf. 16, H- 1625, Hungary, tel+36 66 464 160, fax: +36 1 221 4071, email: info@cavalloni.hu, web: http://www.cavalloni.hu	October 31 near Sheffield	BMFA 7th F1E Contact: Ian Kaynes, 01252 512538
October 9-10 Sculthorpe	BMFA Team Selection 3. F1A, F1B, F1C. Contact: J Carter, 01782 398816	November 6-7	BMFA Salisbury Plain. See Oct 2-3 entry.
October 9-10	BMFA Salisbury Plain. See Oct 2-3 entry.	November 7 Barkston Heath	Grantham Falcons Gala. CR, CG, CP, mini vintage, CLG. All to BMFA rules. 9am start, Contact John Carter 0772 516 4372
October 10 Middle Wallop	SAM 1066 Fun Fly and Trimming Day. Contact Mike Parker, tel 0118 948 1392 membership@sam1066.org	November 13-14	BMFA Salisbury Plain. See Oct 2-3 entry.
October 15-17 Sentjernej, Novo mesto, Slovenia	Krka Cup. F1A F1B F1C. World Cup event. Entry fee €30. Contact: Janko Groselj JR, Devinska 7, 1000 Ljubljana, Slovenia, tel+386 7 33 48 222 or +386 41 731 660, fax: +386 7 33 48 222, email: aeroklub@insert.si, web: http://www.aeroklub.insert.si	November 20-21	BMFA Salisbury Plain. See Oct 2-3 entry.
October 16-17	BMFA Salisbury Plain. See Oct 2-3 entry.	November 21 Hinckley	BMFA Free Flight Forum. Start 10.00. See details in this issue.
October 17 Area Venues	BMFA 8th Area. CG Team (Model Engineer/ Plugge), F1C, F1Q (Plugge), F1G, Classic R/P (Plugge), Mini Vintage	November 27-28	BMFA Salisbury Plain. See Oct 2-3 entry.
October 23-24 Capannori, Lucca	5th FAVLI World Cup. F1A F1B F1C. World Cup event. Entry fee €50. Contact: Maurizio Tomazzoni, Via Rialto 36, 38068 Rovereto (TN), Italy, tel+39 0464 430230 , email: gaetom@tele2.it	December 5 Middle Wallop	Coupe Europa. F1G, Vintage CdH. Start 10am See FFn 1002. Contact M Dilly 0208 777 5533, martindilly@compuserve.com
October 23-24	BMFA Salisbury Plain. See Oct 2-3 entry.	The following items are taken from the final draft BMFA calendar for 2011. Full BMFA calendar in FFn next month.	
October 24 North Luffenham	BMFA Midland Gala. SLOP, Mini Vintage, F1G, F1H, F1J-1/2A, P30, CO2, E30, HLG/CLG. Contact: P.Ball, 01332 665361	January 23 Area Venues	BMFA 1st Area. C/G (Plugge), C/R(Plugge), C/P (Plugge), Mini Vintage, SLOP.
		February 20 Area Venues	BMFA 2nd Area. C/P (White), F1A (KMAA/Plugge), F1G, Vintage R/P (Plugge), Vintage Glider, HLG- CLG(Plugge).
		March 6 Area Venues	BMFA 3rd Area. C/G, F1B (Duce/Plugge), F1J-2A, Mini Vintage(Plugge), P30 (Plugge).
		March 27 Area Venues	BMFA 4th Area. C/R (Gamage), F1C(Halfax/Plugge), F1Q, F1H(Plugge), SLOP (Plugge).

BUILDING A WING THE ALLNUTT WAY - KIND OF

By Chris Edge

In a recent FFn the method of building wings without a traditional lower surface jig was described. Having made some comments on the method and spoken to Peter Allnutt some more I figured I should have a go myself. To make matters worse I did it 'in the public eye' via a build thread on the Flyquiet FF Forum, see here :-

<http://www.flyquiet.co.uk/smf/index.php?topic=2286.0>

The wing is finished (but not yet flown) and I thought I should feedback some of my experiences to this fine organ in case others want to try this method.

First thing was that I wanted to build in a similar way to normal, so the herringbone and d-box shell assembly first and then the rear ribs with cap strips added with the wing still on the jig; accordingly I needed to modify Peter's method. I also decided to build the wing upside down as this allowed better inspection of the shell to spar joint as it cured - the extended upper d-box getting in the way if you did it 'right side up'.

The thread shows the details which I won't repeat but I managed to build the whole d-box/spar assembly AND extract it from the boundary ribs without incident. In fact to do this I ended up carefully sliding in and then removing components and assemblies from the boundary ribs (tolerance 0.1mm !) lots of times - use of release film helps a lot here. I also managed to remove the need for clamp block to push the herringbone in to the shell by simply using the rear rib halves (note that I got Belair to add a vertical cut at the rear spar position on all the ribs - saves a lot of work).

The shell to herringbone gluing took a bit of thought but I found a way of doing it successfully with balsa blocks on backing tape. Consolidation pressure was via a combination of numerous clamps (wind them up until you just hear the balsa ribs cracking) and weights. The end result is very good and avoids screwing things to the baseboard as Peter has suggested which I figured was a lot less reproduceable.

Once the d-box assembly was cured the top of the boundary ribs were cut away so that the rear ribs parts, TE and capping strips could be added. This worked fine and on removal from the jig the resultant wing panels turned out to be nice and flat.

In summary I found the method challenging but ultimately rewarding and it shows yet again that old age and cunning (Allnutt) can still come up with some great ideas. The key is to get the ribs cut accurately and here I found Belair did a good job. The biggest problem I had was creating the CAD files for the tapered tip ribs although I suspect these could be done using a spreadsheet or the famous Keynes plotting software if you have a method of converting the file format.

KAPTAIN DARLING 1 AND 2, F1AS BY PER FINDAHL

Kaptain Darling 1

This was a first test to make a shorter flapper model for stronger wind conditions. I copied Victor Stamov's long model layout with minor changes. This model has the D-box from Attila Zékelyhidi, and I use the same airfoil as Victor has on his long model. I built the wing myself and I also use the same flapper mechanics that I use on Lord Flash 4. The stab airfoil is also the same as on Lord Flash 4, the stab is made by Igor Yablonovsky. On this model I have quite weak flap spars, thus I had some problems to get the flaps to move evenly over the whole wing. Even with this unsolved problem, I got the model to work really well. This model behaves great on the line, both

in wind and in calm. Kaptain Darling 1 has the weakest spar of my three flappers, so in light wind it is a bit difficult to get tension on the line and good speed with this model. I fly with the CG at 51 % and the hook at 49 % of the chord measured from the leading edge of the wing. This model has no wing wiggler.

Kaptain Darling 2

The wing in this model was originally made by Oleg Pshenychny, but I added the small extra tips myself, because of a misunderstanding with the wing area. The stab airfoil is the same as on Lord Flash 4, the stab is made by Igor Yablonovsky. On this model I have the M&K flap system. The mobile Ehook helps with finding the best hook position. This is also an extra safety feature that helps if the model doesn't have the right trajectory in the acceleration, the mobile E-hook makes it possible to abort a launch and go again. In addition, the model has a wing wiggler. The glide is really great and I think it is because the airfoil on the wing is perfect. The flaps features wide carbon sock-reinforced flap spars and smooth hinges. The flaps move perfectly evenly along the whole wing. I fly with the CG at 51 % and the hook at 49 % of the chord measured from the leading edge of the wing. I used this model in all three fly-off wins that gave me the World Cup title in 2009.

FF CRO CUP, KRBAVA, CROATIA, AUG 28-29

F1A 34 flew

1	D Terlep	SLO	1179
2	R Koglot	SLO	1158
3	A Vrtovec	SLO	1155
4	M Kremic (J)	BIH	1099
5	N Bardarov (J)	BUL	1076
6	R Bjelajac	BIH	1073
7	H Fuss	AUT	1054
8	T Kiss (J)	ROU	1041
9	L Modric (J)	CRO	1035
10	M Hrastovec (J)	CRO	1022
11	I Kusicka	CRO	972
12	B Moze	SLO	906

F1A-Junior 12 flew

1	M Kremic	BIH	1099
2	N Bardarov	BUL	1076
3	T Kiss	ROU	1041
4	L Modric	CRO	1035

F1B 7 flew

1	A Franic	CRO	1148
2	R Kolar	CZE	667
3	N Banjac	CRO	460

F1C 3 flew

1	R Truppe	AUT	360
2	D Jermol	CRO	314

HURON CUP, BORDEN, ON, CANADA, SEPTEMBER 4

F1A 5 flew

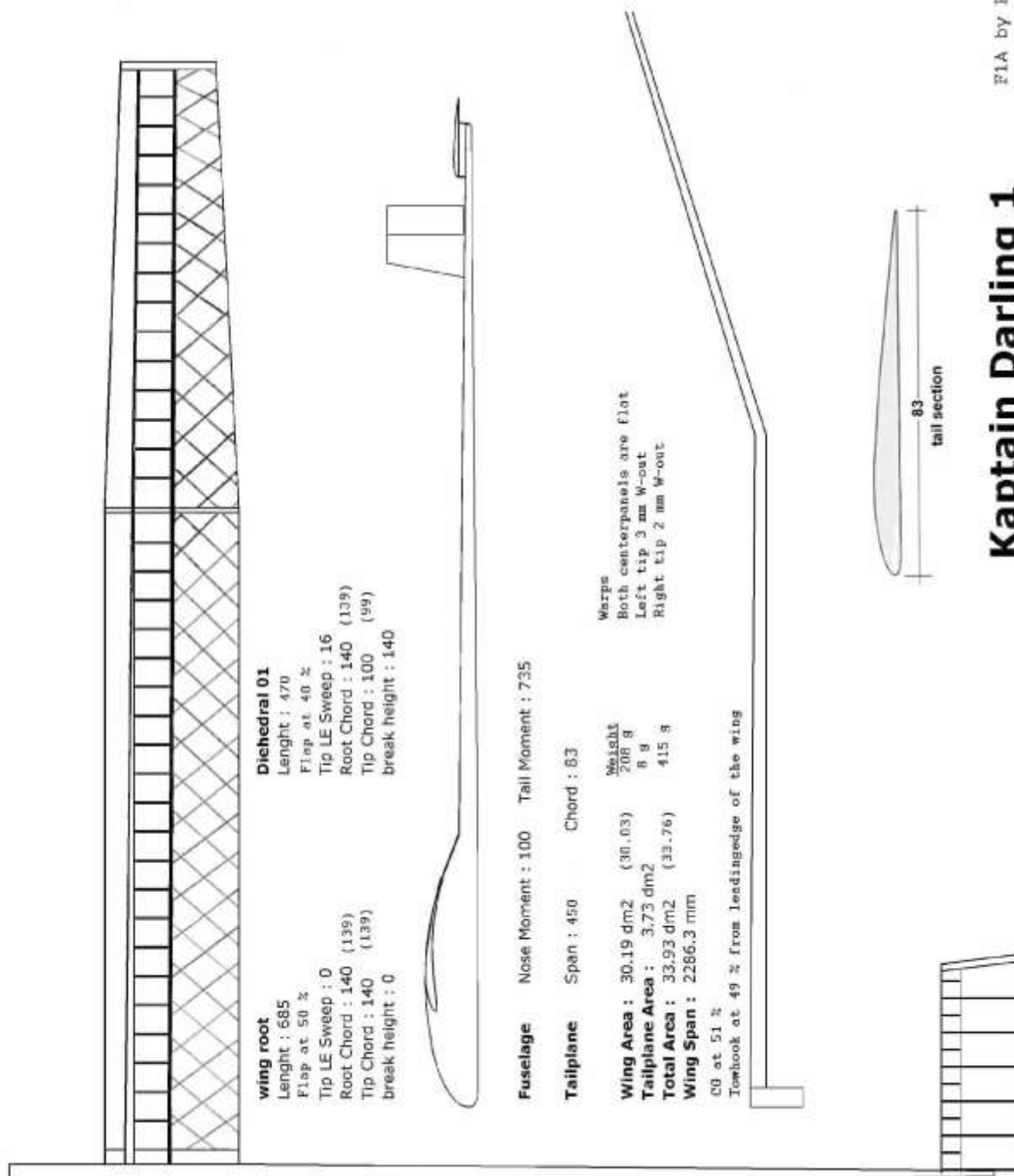
1	P Allnutt	CAN	586
2	I Fradkin	USA	548
3	T Boiadziev	CAN	496

F1B 5 flew 3 full scores

1	P Beldam	CAN	600	+120	+120
2	L Horak	CAN	600	+120	
3	B Suranyi	ROU	600	+93	

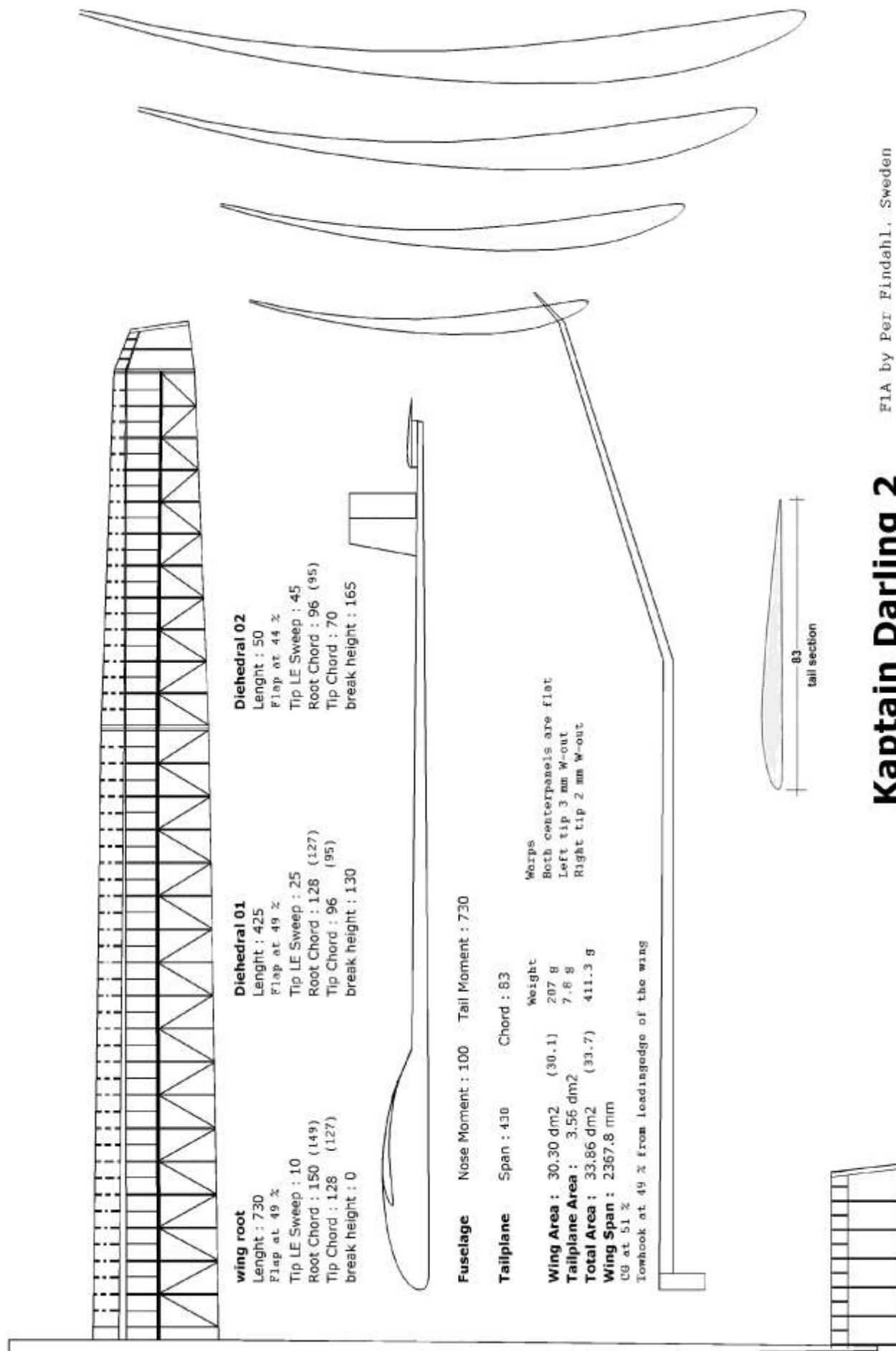
F1C 3 flew

1	Y Shvedenkov	CAN	600
2	F Schlachta	CAN	593



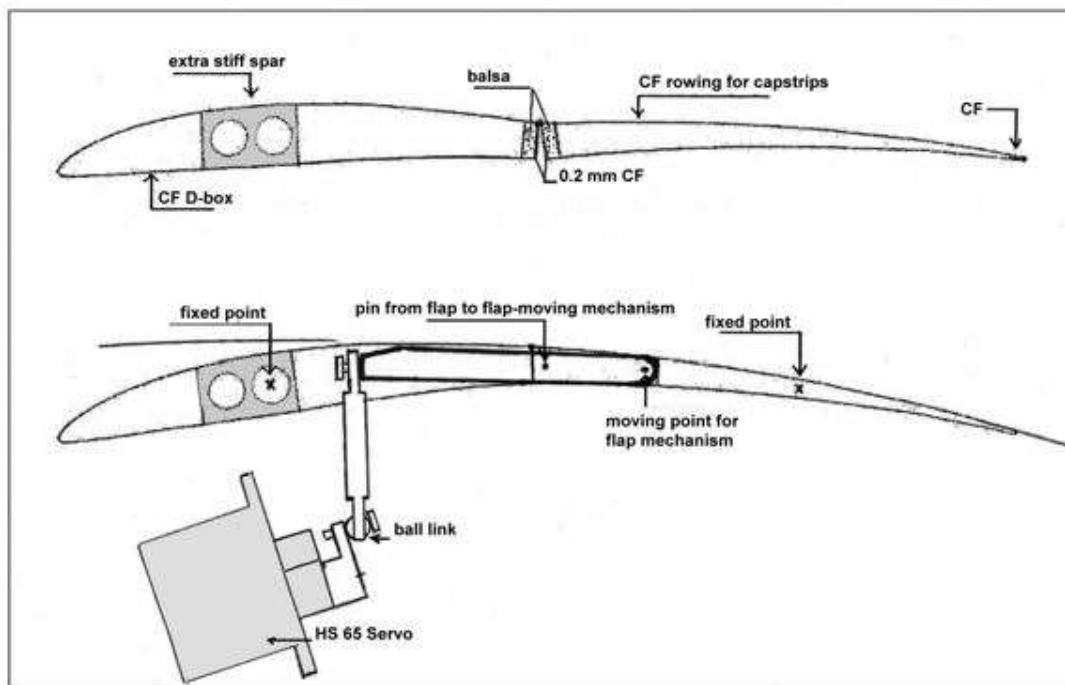
Kaptain Darling 1

FIA by Per Findahl, Sweden



F1A by Per Findahl, Sweden

Kaptain Darling 2



Flap mechanism for Lord Flash 4 and Kaptain Darling 1.

The flap mechanism for Kaptain Darling 1 is slightly changed from the drawing, the hinge is on bottom of the wing, not on top. The servo turns 180 deg, this makes the middle of the wing go up and down.

CANADA CUP, BORDEN, CANADA, SEPT 5

F1A 5 flew

1	V Nikolajevs	CAN	575
2	L Farkas	CAN	487
3	I Fradkin	USA	485

F1B 5 flew

1	P Beldam	CAN	541
2	B Suranyi	ROU	540
3	T Mathews	CAN	485

F1C 3 flew

1	Y Shvedenkov	CAN	600
2	F Schlachta	CAN	552

BULGARIA CUP, PAZARDZIK, BULGARIA, SEPTEMBER 17-19

F1A 18 flew

1	D Terlep	SLO	1290	+280
2	M Mandichev	BUL	1290	+186
3	T Bonchev	BUL	1290	+163
4	R Lesko	CRO	1245	
5	N Nikolov	BUL	1237	
6	N Bardarov (J)	BUL	1187	
7	O Sevgi	TUR	1145	
8	B Bardarov	BUL	1127	

F1A-Junior 6 flew

1	N Bardarov	BUL	1187
2	M Krupa	POL	1072
3	V Dimitrov	BUL	1034

F1B 11 flew

1	I Yurtseven	TUR	1320	+319
2	S Skibicki	POL	1320	+252
3	P Mihaylov (J)	BUL	1274	
4	V Savov	BUL	1254	
5	S Sabo	BIH	1211	

F1B-Junior 5 flew

1	P Mihaylov	BUL	1274
2	B Bilewicz	POL	1070

F1C 3 flew

1	N Nikolov	BUL	602
2	O Vasilev	BUL	441

TOSZEK CUP, TOSZEK, POLAND, SEPT 11

F1E 35 flew

1	K Zurowski (J)	POL	408.62
2	F Draghici	ROU	400.99
3	S Kubit	POL	385.80
4	K Szymanska (J)	POL	383.81
5	M Popescu	ROU	383.00
6	J Orel	CZE	372.14

F1E-Junior 9 flew

1	K Zurowski	POL	408.62
2	K Szymanska	POL	383.81
3	S Morcinek	POL	344.41

GOVERNOR'S CUP, Toszek, Poland, Sept 12

F1E 32 flew

1	S Kubit	POL	500.00	+81
2	M Popescu	ROU	500.00	+65
3	I Treger	SVK	481.67	
4	D Bildea	ROU	474.50	
5	J Wojtak	POL	471.25	
6	V Zima	CZE	470.67	

F1E-Junior 6 flew

1	A Anca	ROU	469.58
2	K Szymanska	POL	460.08
3	M Niculescu	ROU	423.98

F1E AT TOURTENAY, FRANCE SEPT 25-26

Report by Ian Kaynes

The weekend had a variety of weather, with the local weather forecast having got it almost exactly right except that there were no showers. The wind was predominantly from the north and so instead of the Tourtenay slopes we went to the St Jean do Sauvres slope where a slope faces north on to usual open French countryside. The Saturday morning started windy, close to 9 m/s, but moderated during the first round for which a 120 max had been set. A 180 max was set for the next round and indeed for all the remaining rounds of the weekend. Four flyers maxed out and launch position was set up on the lower slope with wind now about 5 m/sec. Suddenly an enormous gust came through – I recorded 19.5 m/sec – followed by a general increase of wind speed to over 8 m/s. Claude Leduc, in his first F1E flyoff, made the 5 minute max soaring well into the wind. The other more experienced flyers drifted one way or the other to take second and third with junior Thomas Piller coming fourth.

After the usual pleasant prize-giving and evening meal at the Pigeonnier in Tourtenay, Sunday dawned quite cool but sunny

and with the forecast lighter wind. This made for pleasant flying for the two morning rounds, although difficult to max in the first round. After the lunch break the wind had started to increase and this continued through the remaining rounds, with the final flights being made in wind approaching 9 m/sec. Not surprisingly there was no need for a flyoff. Jean-Luc Drapeau was the winner, having dropped just 7 seconds in the first round (which flight had landed 10m up in a tree) and maxed for the rest of the day. The prize-giving was held on the field, with printed results distributed.

The weekend had made little difference to the F1E World Cup top places. Before this weekend Stanislav Kubit was leading Marian Popescu by 3 points. Both came to Tourtenay. Stanislav dropped significant time in one flight in each competition, so that he started the long drive home to Poland after lunch on Sunday. Marian was on the podium both days and his best result was his second place on Sunday which served to improve on one of his previous second places by virtue of one extra bonus point. The gap closed to two points and all is still to play for in the final competition which is in Slovakia on October 2.

6th Poitou Charentes, September 25

F1E 35 flew

1	C Leduc	FRA	500.00	+300
2	P Chaussebourg	FRA	500.00	+276
3	M Popescu	ROU	500.00	+268i
4	T Piller (J)	FRA	500.00	+116
5	J Drapeau	FRA	492.20	
6	G Vaucelles	FRA	475.00	
7	A Trachez (J)	FRA	457.21	

F1E-Junior 7 flew

1	T Piller	FRA	500.00	+116
2	A Trachez	FRA	457.21	
3	F Primau	FRA	452.22	

Poitou Moncontour, September 26

F1E 35 flew

1	J Drapeau	FRA	496.10	
2	M Popescu	ROU	487.20	
3	G Vaucelles	FRA	470.55	
4	T Piller (J)	FRA	469.42	
5	M Rigault	FRA	461.66	
6	M Delfabro	ITA	450.00	
7	A Roux	FRA	448.88	

F1E-Junior 7 flew

1	T Piller	FRA	469.42	
2	F Primau	FRA	379.97	
3	C Trachez	FRA	328.32	

FAI FREE FLIGHT WORLD CUP

F1A

1	S Makarov	RUS	157	BL-1	ES-1	PT-1	MK-1
2	D Terlep	SLO	152	SM-1	CR-1	BU-1	IK-2
3	P Findahl	SWE	148	SL-1	BC-1	BL-2	ES-2
4	R Koglot	SLO	142	IC-1	SF-1	MR-2	CR-2
5	P Mitchell	AUS	140	SC-1	OM-1	AC-2	KU-7
6	V Stamov	UKR	133	MM-1	AN-1	NC-3	AL-4
7	R Lesko	CRO	129	MR-1	NC-1	BU-4	
8	E Ragot	FRA	121	VS-1	HL-1	PT-10	EF-18
9	B Van Nest	USA	115	KU-1	SC-2	AC-4	SL-6
10	Y Titov	RUS	113	AL-2	ZM-2	MK-3	NL-14
11	I Kreetz	NED	106	DK-1	EF-2	VS-15	
12	M Kosonozhkin	RUS	102	BC-2	SE-3	VS-4	EF-6

F1A-Junior

1	N Bardarov	BUL	151	BU-1	DZ-1	IC-1	CR-2
2	O Findahl	SWE	151	BC-1	HL-1	SH-1	SL-11
3	A Plume	LAT	141	SE-1	AL-1	BC-2	DK-2
4	A Khoroshev	RUS	140	WN-1	AN-1	CB-2	ZM-1

F1B

1	B Silz	GER	159	EF-1	PT-1	DK-1	
2	O Kulakovsky	UKR	150	AL-1	NL-1	EF-2	NC-2
3	I Vivchar	UKR	137	NC-1	AN-1	EF-3	MR-5
4	R Blagojevic	SRB	134	SF-1	MR-2	SA-2	
5	M Seifert	GER	128	VS-1	BL-2	SL-3	MM-10
6	M Woolner	GBR	125	ES-1	AL-2	EF-4	BL-4
7	S Sabo	BIH	122	SA-1	DZ-1	NC-6	BU-5
8	V Urban	CZE	115	IC-1	ES-3	MR-3	VS-7
9	T Christensen	SWE	112	BL-1	DK-3	AL-4	ES-18
10	V Rosonoks	LAT	112	ES-2	SE-2	SL-4	
11	T Bond	AUS	108	AC-2	OM-2	SC-4	KU-5
12	T Luman	EST	105	HL-2	NC-3	BC-3	ES-4

F1B-Junior

1	B Skibicki	POL	152	BL-1	VS-1	KZ-1	MR-1
2	O Findahl	SWE	122	SH-1	BL-2	ES-3	
3	T Mackus	LTU	101	ES-1	HL-1		

F1C

1	R Truppe	AUT	156	AL-1	NC-1	DZ-1	CR-1
2	J Roots	EST	143	SE-1	DK-1	ES-2	BC-2
3	V Sychov	SLO	143	BL-1	WN-1	CB-2	KZ-3
4	A Jack	GBR	142	PT-1	OM-1	SC-2	AC-2
5	C Gretter	GER	140	IC-1	SF-1	IK-2	ES-5
6	G Zsengeller	HUN	116	SL-1	AL-2	KZ-6	MR-5
7	Y Perchuk	RUS	112	CB-1	WN-3	SE-3	
8	P De Boer	NED	108	DK-2	SE-2	VS-4	BL-4

F1Q

1	M Lihtamo	FIN	150	HL-1	DK-1	SE-1	MR-2
2	R Assmuss	GER	140	BL-1	EF-1	DK-2	ES-2
3	K Salzer	AUT	140	ES-1	SA-1	HL-2	BL-2

F1P-Junior

1	A Matras	POL	150	BL-1	ES-1	KZ-1	SL-2
2	T Malkhasyan	USA	75	MM-1	SL-4		
3	C Fux	GER	51	SL-1			

F1E

1	S Kubit	POL	142	GC-1	PC-2	OB-2	HA-5
2	M Popescu	ROU	140	LP-1	GC-2	PU-2	CS-2
3	F Draghici	ROU	128	OB-1	TZ-2	HA-3	TC-8
4	F Kanczok	POL	118	TC-1	LP-2	TZ-8	HB-8
5	J-Luc Drapeau	FRA	116	PU-1	TC-3	LP-4	PC-5
6	I Treger	SVK	97	HA-2	GC-3	PC-7	LP-5

F1E-Junior

1	A Anca	ROU	154	PC-1	GC-1	HB-1	LP-2
2	K Szymanska	POL	136	LP-1	PC-2	TZ-2	GC-2
3	D Drmlova	SVK	115	CP-1	PC-3	HA-3	LP-4

BMFA 1ST TEAM SELECTION, SALISBURY PLAIN, SEPT 11-12

F1A 13 flew

			pts
1	P Williams	20.30	5.00 50
2	J Carter	20.30	3.09 45
3	B Baines	20.30	2.40 40
4	J Williams	20.23	35
5	K Best	19.29	30
6	C Edge	18.56	27
7	A Jack	18.30	24
8	P Tribe	17.52	21
9	D Oldfield	17.22	18

F1C 3 flew

1	A Jack	11.30	50
2	S Screen	7.25	45
3	N Allen	6.00	40

F1B 11 flew

		pts
1	M Woolner	20.30 50
2	B Martin	20.23 45
3	P Martin	20.12 40
4	M Evett	18.47 35
5	R Peers	18.04 30
6	P Brown	17.53 27
7	M Woodhouse	17.21 24
8	D Greaves	13.23 21

SOUTHERN GALA, SALISBURY PLAIN, Sep 4

Combined Glider 10 flew

1	J Cooper	Biggles	9.00	4.59
2	D Cox	Crookham	9.00	3.31
3	J Pennington	B&W	9.00	2.13
4	J Hook	Crookham	8.23	
5	J Carter	Grantham	7.54	

Combined Rubber 6 flew, 4 in flyoff

1	A Beales	Croydon	9.00	8.22
2	P Ball	Grantham	9.00	7.21
3	T Tyson	Crookham	9.00	4.15
4	C Foster	Morley	9.00	3.25

Combined Power 6 flew

1	M Lester	Birmingham	9.00	
2	A Shepherd	Crookham	8.53	
3	T Grey	Crookham	8.36	
4	T Payne	Biggles	8.11	

F1G 11 flew

1	R Vaughn		10.00	4.26
2	G Stringer	Crookham	10.00	3.48
3	P Hall	Crookham	10.00	2.43
3	P Brown	Grantham	10.00	2.43
5	C Chapman	B&W	9.50	

F1H 9 flew

1	J Cooper	Biggles	10.00	3.43
2	G Madelin		10.00	3.07
3	C Parry	Biggles	9.54	
4	P Tribe	B&W	9.06	

F1J/1/2A 5 flew

1	P Watson	Birmingham	10.00	
2	S Dixon	Birmingham	9.57	
3	B Aslett	B&W	9.40	

HLG/CAT 7 flew

1	W Colledge	Birmingham	6.01	
2	P Ball	Grantham	5.36	
3	J Pennington	B&W	5.24	
4	P Tolhurst	Hayes	5.04	

Mini Vintage 5 flew

1	A Shepherd	Crookham	6.00	3.30
2	C Strachan	Biggles	6.00	2.34
3	M Stagg	MFFG	4.00	

E 30 4 flew

1	T Grey	Crookham	6.00	7.18
2	C Strachan	Biggles	6.00	4.46
3	P Seeley	B&W	6.00	3.03

SLOP 3 flew

1	C Redrup	Crookham	7.42	
2	C Foster	Morley	7.17	

COUPE LEAGUE 6TH ROUND - SOUTHERN GALA

By Roy Vaughn

The competition was flown in reasonable conditions, wind 10-15 mph and only a spot of rain later in the day. Upwind trees turbulated the flow and lift was hard to spot all day. Most flights which did max scraped in. A number of people who dropped early quit Coupe to fly the BMFA Rubber event. Four fliers maxed out, with a tie for third place.

The League is still wide open. With two rounds to go (8th Area and Coupe Europa), five flyers have a realistic chance of taking the cup. The full League table can be found on the SAM 1066 web site.

Points from Southern Gala (results above)

1	R Vaughn	20	3	P Brown	13
2	G Stringer	17	5	C Chapman	10
3	P Hall	13	6	M Marshall	8

Southern Coupe League after 6th Round

1	R Vaughn	72
2	P Brown	71
3	A Longhurst	66
4	P Hall	61
5	C Chapman	56

BMFA SENIOR CHAMPIONSHIPS

Scores are given for the most recent events

		East Anglia		Area	Total
		D1	D2	6	
1	P Ball	12			120
2	C Foster	7	1	3	91
3	A Shepherd	3	6		75
4	C Strachan	8	12	11.5	72.5
5	T Grey	2	3		51
6	P Watson				49
7	R Heap		15	1	43
7	F Rushby		4	6	43
9	S Willis	3	5		43
10	S Barnes				42
10	P Brown			9	41
12	J Foster	2	4	10	41
13	J Cooper	6			38
14	D Taylor		6		30.5
15	J Carter				28
16	A Crisp				27
17	P Tolhurst		2		26
18	J O'Donnell			1	25
18	R Peers				25
20	W Colledge	9			22
21	C Parry			9	21.5
22	S Brewer			5	21
22	P Woodhouse	1			21
22	J Hook			2	20
22	P Seeley			8	20
26	G Stringer				20

OPEN RUBBER LEAGUE

Still to be counted: Southern Gala, Farrow, Falcons.

		points	best 3
1	P Ball	Grantham	84
2	G Ferer	Timperley	79
3	J O'Donnell	Timperley	52
4	J Cooper	Biggles	41
5	S Willis	Croydon	35
6	C Foster	Morley	29
7	D Neil	B&W	25
8	D Taylor	Richmond	25
9	C Chapman	Bristol	22
10	C Strachan	Biggles	12
10	R Wilkes	Crookham	12

NOTICEBOARD

RADIO BEACONS. Jan Somers has for sale 4 radio beacons, flat Pim Ruyter type (20*14*6 mm), that operate on round 3V lithium cells (30mm long, 4 mm diameter). The frequency is 146.800. They were formerly used by Jan's wife. Jan uses another frequency himself. You can contact Jan at: j.somers@me.com

COUPE FOUND NEAR BARKSTON. Wlter Hodkinson has a Coupe which was found some time ago by a farmer in a field south of Barkston. The bailer ate one wing and the other is flattened. There is a Kevlar fuselage intact but with no name on it. Contact Walter on 0140 023 0764

NFFS SYMPOSIUM REPORT 2010

The 2010 Symposium Report is another edition with an international editor, this year in the hands of Australian Sergio Montes, FFQ editor.

The first article is by Per Findahl "The Question Remains, Three Years Later, To Flap or Not to Flap?". Per discusses some of the fundamentals of whether free technical advances should be allowed or not then goes into the details of his range of flap models, including comments on reliability and the importance of flying in good air. Plans are included for Kaptain Darling 1 and 2, also included in this FFn

"That Elusive CG" is an attempt by Peter Allnutt to quantify the desirable CG position for an F1A, which in the end revolves around observation of the stability of recovery from an upset launch.

Allard Van Wallene and Rene Limberger give a detailed discussion of their approach to "F1A Mechatronics" going through their various developments culminating in a timer with a large list of functions integrated into it.

Dieter Siebenmann writes about his fully carbon skinned wings which have been a notable new feature to F1B. Dieter describes the development of his structures and the building process for making the skins, the ribs and assembling the wings.

The C28 F1B design flown in the 2009 World Championships in Croatia is described by Eugeniusz Cofalik

Peter King has carried out analyses on the benefits of variable pitch and variable diameter props for F1B and F1G. He concludes that his predictions show little benefit from other complication of the propeller, and for good measure he also debunks any value in delayed prop release. He reckons that an instant prop release with a fast launch is better.

Peter Gruenbaum reviews the development of "rubber propeller folding over the years". He also recommends some of the methods for calculating skew angles.

In "Features of folder/flapper wing in F1C design" Gil Morris presents an update and further details of his model which featured as a model of the year in the 2009 Symposium Report

Claudio Bognolo presents "F1E Steering System Using CMPS03 Electronic Compass", a complete and complex analysis on how to extract the magnetic heading from electronic compasses.

Klaus Salzer describes the components required for electric free flight and then continues to discuss his approach and present plans of his models, finishing with a discussion of possible rule changes.

Bill Henn gives an article on development of multi-motor rubber powered scale model aircraft. Also on scale, Keith Sterner writes about counter-rotating propeller drives for rubber scale models, with an apparent dislike of British post-war aircraft.

In a section on free flight publications, I present an update on the story of FFn, Don DeLoach writes about the history of the NFFS Digest, and Bernhard Schwendemann on the history of Thermiksense.

Brian Eggleston, Paul Love and Ken Bauer have written an article on using XFOIL to develop sections for HLG and CLG models, probably a more challenging application than Eggleston's recent work on F1A sections. He studied section changes which replicated the practical changes that flyers

include in their sections, like a flat region on the upper surface near the leading edge. Predictions conclude that duration could increase by about 10%.

Louis Joyner discusses the "Vertical stabiliser airfoils-the forgotten section", that is the fin section in English. He describes various interactions of fins and rudders with rubber model trim and concludes that experimentation is needed.

In "Old tools for new "restricted" classes" Jean Wantzenriether describes trimming techniques that could be applied if technology was restricted in a class.

On the practical side, Edgardo Figueroa describes modifying Tomy-toy mechanisms for free flight timers.

In "The (Inexorable?) march of technology within free flight aeromodelling" Michael Woodhouse discusses the situation of technology in FAI classes with reference to the British proposals to the 2010 CIAM meeting.

Jerry Murphy presents the 2010 Models of the Year:

Electric indoor	Ray Harlan	Slo Lightning II
Indoor	Gary Hodson	WART A-6
Discus IHLG	Stan Buddenbohm	Holy Grail
F1A	Makarov & Kochkarev	Extra Long flapper
Mulvihill	Bill Shailor	Booda
CNC	Free flight enterprise	
P30	David Sechrist	Super Skinny E
Scale	Richard Adams	F4U Corsair

Louis Joyner chaired the Hall of Fame Committee which awarded: Paul Crowley, Mike Fedor, Jay Jackson, Faust Parker, and Andrew Tagliafico.

The 204-page report closes with biographical details of the contributors

This Report is available from FFn at a cost of £25.30 including postage in the UK and to Europe. If you want to renew you FFn subscription at the same time, the cost for 2011 is £20 UK and £22 Europe. There will be a subscription form in the November FFn. Orders can be submitted via the website at

BMFA FREE FLIGHT FORUM

The twenty-seventh BMFA Free-Flight Forum will start at 10 a.m. on Nov. 21st, the day after the AGM, at the Barcelo Hinckley Island Hotel, A5 Watling Street, Hinckley, LE10 3JA. You can attend the AGM, enjoy the dinner, meet other flyers in a relaxed atmosphere and then follow it up the next day by catching up on the developments, techniques and aerodynamics of today's free-flight.

Among the topics and speakers will be: Mark Benns - Making and Using Steering Balloons; Neil Cliff - Some Aspects of Construction - D-boxes, Carbon Spars and Open Rubber Fuselages; Mark Benns - Partial Motor Flying - Is It a Direct Comparison to a Full Motor?; Roy Vaughn - Up the Pole - Endeavours in Electronic Air Picking; Ian Kaynes - Design, construction and flying F1E; Ray Elliott - Single-Blade Propellers; Peter Brown - A Radio-Linked Thermistor; Peter Halman - High Performance Engines; Mick Lester - Making Carbon Tubular Spars and Other Amusing Techniques.

Lunch will be available and the finish will be at around 5 p.m. The cost for the session will be just £8, with proceeds going towards the expenses of the teams that represent us at World and European F/F Championships. Pre-booking will ensure that you get a seat, so send your cheque, payable to 'BMFA F/F Team Support' to the BMFA office at 31, St. Andrews Road, Leicester LE2 8RE.