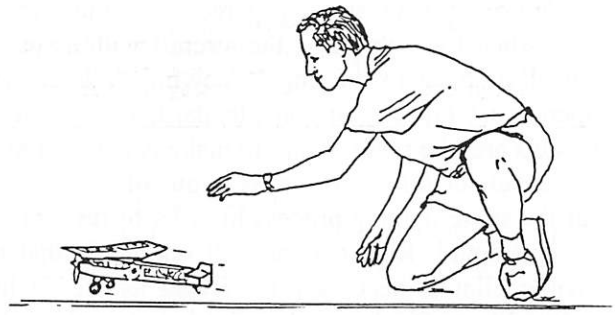
Indoor News



Issue 47 August 1998

DIARY

14-16 Aug Santa Fe Argentina	**Argentine 98 Indoor Championship.** Contact: Jorge Conti, Tel 54 1 644 2121, Fax 54 1 778 4590, E mail: aumnteng@satlink.com.ar. Details see elsewhere in this issue.
27-30 Aug Angleur Belgium	**Indoor International. All classes.** Contact: B. Delhalle, 62 rue de Souvret, B-4000 Liege, Belgium, tel +32 4275 0523. Details see IN46.
29-31 Aug Cardington England	**British Indoor Nationals.** Contact: Laurie Barr "Herries Cottage", Winter Hill Road, Pinkneys Green, Berks., England SL6 6PJ, tel 01628 487544.
11-17 Oct Slanic Romania	**F1D Indoor World Championships 1998.** Contact: Federatia Romana de Modelism, Str Vasile Conta no. 2, sector 2, 70139 Bucharest, Romania, tel +40 1211 0160, fax +40 1210 0161.
20 Dec Enschede Netherlands	**Open Dutch Championships F1M and Sainte Formule + Junior contests** Details see elsewhere in this issue.

POSTAL/PROXY EVENTS

Winter 98/99	**AeroNutz Indoor Schneider Cup,** see info in IN 45

U.K. INDOOR SCALE NATIONALS

NOTTINGHAM, 10th May 1998

Report by Reg Boor, U.K.

This event seems to arrive on the calender year-by-year as fast as I can report upon it, and certainly faster than I can build a new aeroplane. Anno Domini, I suppose!

Nevertheless, this was an interesting meeting on a number of counts, in that, for one thing, the only foam model to place this year was Richard Crossley's Folkerts Speed King which was 2nd in Pistachio. Richard did not compete in any other event. Peter Smart flew his mighty foam Tupolov Bear in the F4D rubber contest but had to be content with 4th place. However, Peter did manage a "first", in another sense, he entered a foam Bristol Bombay in F4E, CO2/Electric, which is the first time a foam model has been entered in this particular event. Looking extremely nice in its desert camouflage it was powered by twin Knight and Pridham geared KP00 motors and although it flew very nicely Peter had some difficulty in gauging the charge to effect a satisfactory landing. He has altered his constructional techniques on this model and built the wing hollow in the Tonda Alfery style rather than carve a solid one which has been the usual method in the U.K. Possibly to influence the static score.

However, the scale judges must be casting a more critical eye on foam models than originally as their static scores are not high. But in F4E when one is faced with Goldby's DH9A, Knight's Tiger Moth, Newman's SE5A, Master's SE5A and Causer's AVRO 504K, all of traditional construction as befitting the prototypes and all of which scored over 1000 static points you have to have a model with exceptional flying qualities to be competitive. Richard Granger had just that. His very large English Electric Wren flew slowly and beautifully to give him 1st place in F4E.

COLOPHON

Indoor News is published at least four times a year and covers all types of indoor models, from peanuts to microfilm. Texts can be sent in Dutch, English, German and French. Please type your texts on 12,5 cm width. Texts can be sent on floppy disk (3½ or 5¼) in any text format. I can make drawings, if you are no draftsman.

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Editor:
Thedo André
Meijhorst 35-43
NL-6537JD Nijmegen
The Netherlands
Phone/Fax +31 24 3450711
E-mail: Thedo.Andre@net.HCC.nl

Subscription:
(per 8 issues)
Holland NLG 28,-
Europe NLG 30,-
Airmail USD 20.00

Mike Goldby's CO2-powered DH9A was 2nd in this event and I must say something about this new model. Scale enthusiasts will recognise the prototype when I say that it is the aircraft with a spare wheel strapped to the engine cowling. For desert operations? Of full museum standard, as all Mike's models are, the point I want to make is that he took the excellent pilot and observer out of the model for the static judging process in order to reveal the cockpit detail. Rule experts will remember that a visible pilot is necessary for flying as the flight judges like to see him, otherwise lower marks will be awarded, but he is not required in the static judging process and not having one will not affect the static score. Now you know.

It is interesting to note that the level of flying in F4D, rubber, was higher than that in F4E but that this was not so in the static scores. In F4D 45% of the flights were above 1000 points whereas only 22% were above 1000 in F4E. I have taken-out Smart's complexity bonuses to get this result. Conversely, 36% of the F4E static scores were above 1000 points and only one, 9%, in F4D. That one was Divs Master's new Sopwith Triplane which will achieve better than its 3rd place if he can improve its flying qualities. Placed 1st and 2nd in F4D were Prior's Sopwith Baby and Hetherington's Travelair, both flying very well.

Well, we all thought that the days of the Lacey M10 in F4F, Peanut, were over, by biasing the complexity bonuses heavily against high wing models. Apparently they are not, for Andy Sephton, who has not been seen on the competition round for some years, brought along his 10-year old M10 and won Peanut quite convincingly. Lacey's will just have to have a NEGATIVE complexity bonus!!!

In Pistachio I want to return to Nick Peppiat's Lippisch Storch which was 3rd. This is a high aspect ratio tailless aeroplane with a pusher propeller and with it Nick is getting the highest flight times, average 1 minute 19 seconds, in the contest. Remarkable. Mike Hadland won with his Tiger Moth but another good static score was that of Divs Masters with his Sopwith Tiplane, however, he needs to double his flight times to be among the winners.

Last year Bernard Delhalle came along to be with us. This year we were delighted to greet Han Van Leeuwen and his wife who had travelled from The Netherlands by EUROSTAR especially for the meeting.

RESULTS

F4D, RUBBER

NAME	MODEL	STATIC	FLIGHT	TOTAL
1. Dave Prior	Sopwith Baby	909	1127	2036
2. Barry Hetherington	Travelair	916	1072	1982
3. Divs Masters	Sopwith TRi	1073	904	1977
4. Peter Smart	Bear	771	1134	1905
5. Chris Strachan	Curtiss Owl	846	1015	1861
6. Ray Johnson	Curtiss Owl	731	1062	1793
7. Mike Green	Puss Moth	722	1047	1769
8. Reg Boor	Fury	599	966	1565
9. Mike Hadland	Tiger Moth	867	651	1518
10. Vibes Masters	Lacey M10	704	767	1471
11. John Lawson	Midwing	339	932	1271

F4E, CO2/ELECTRIC

NAME	MODEL	STATIC	FLIGHT	TOTAL
1. Richard Granger	E.E. Wren	990	1061	2051
2. Mike Goldby	DH9A	1132	903	2035
3. Derek Knight	Tiger Moth	1123	850	1973
4. Charles Newman	SE5A	1137	808	1945
5. Peter Smart	Bombay	837	1016	1853
6. Kevin Wallace	S/wth Scooter	737	1049	1786
7. Divs Masters	SE5A	1036	706	1742
8. Dave Causer	Avro 505K	1016	712	1728
9. Geoff Spencer	Aeronca	810	902	1712
10. Chris Strachan	Bristol Prier	521	1136	1657
11. John Hovell	Blackburn	792	830	1622
12. Andy Sephton	ABC Robin	823	763	1586
13. Steven Glass	PO2	771	593	1364
14. Mike Green	Anec	535	819	1354

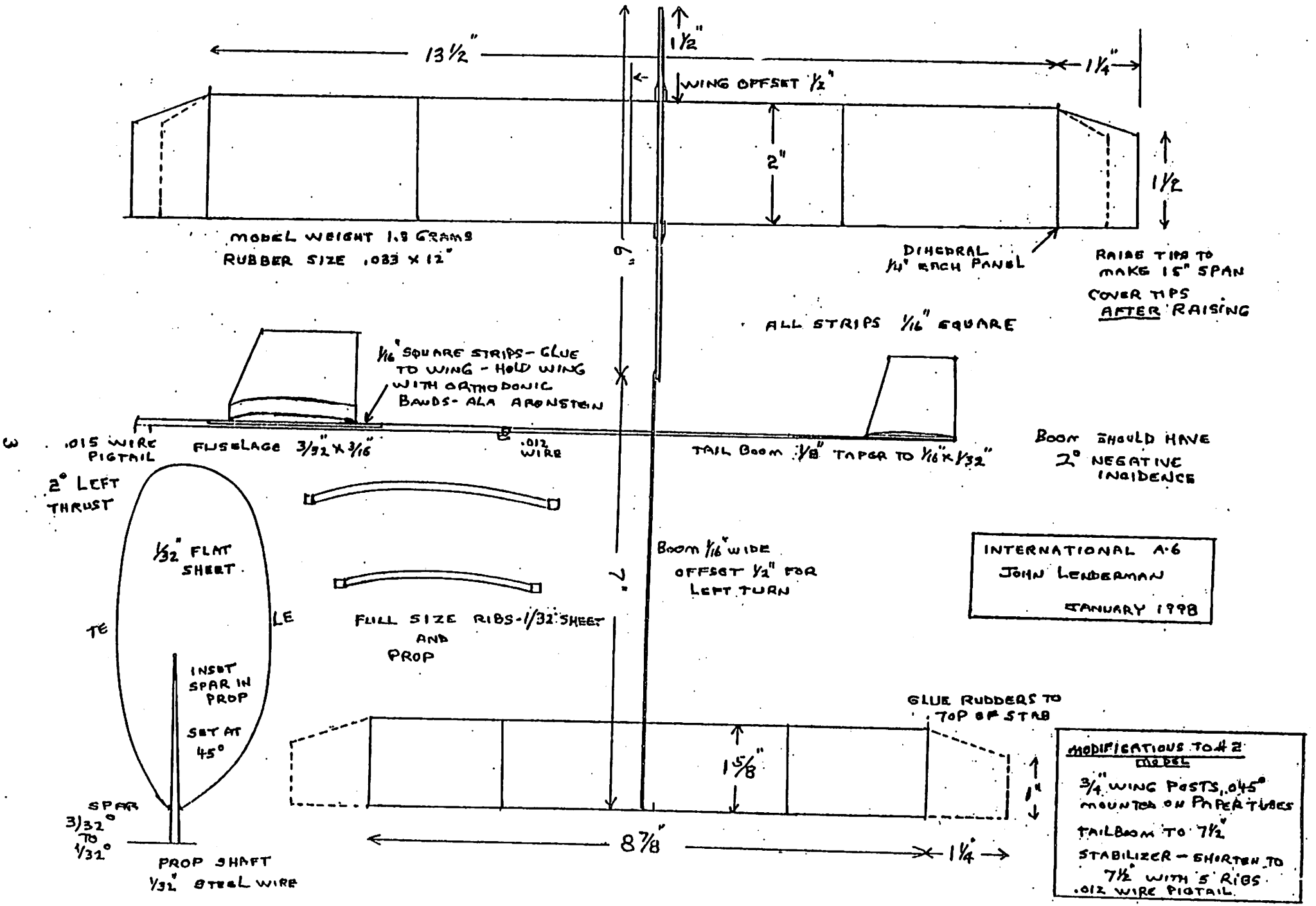
F4F, PEANUT

NAME	MODEL	STATIC	FLIGHT
1. Andy Sephton	Lacey M10	94	124
2. Nick Peppiat	Bluebird	117	91
3. Mike Hadland	Tiger Moth	154	73
4. Divs Masters	Sopwith Tri	152	76
5. Derek Knight	Swift	92	92
6. Peter Boys	Hamilton H47	89	91
7. Chris Strachan	Wee Bee	68	137
8. Vibes Masters	Lacey M10	86	71
9. Stuart Taylor	Neiuport	85	60
10. Ian Pallister	Canberra	67	73
11. David Prior	Mig-3	74	10
12. John Hovell	Blackburn	72	57
13. Bryan Stichbury	Piper Cub	60	64

PISTACHIO

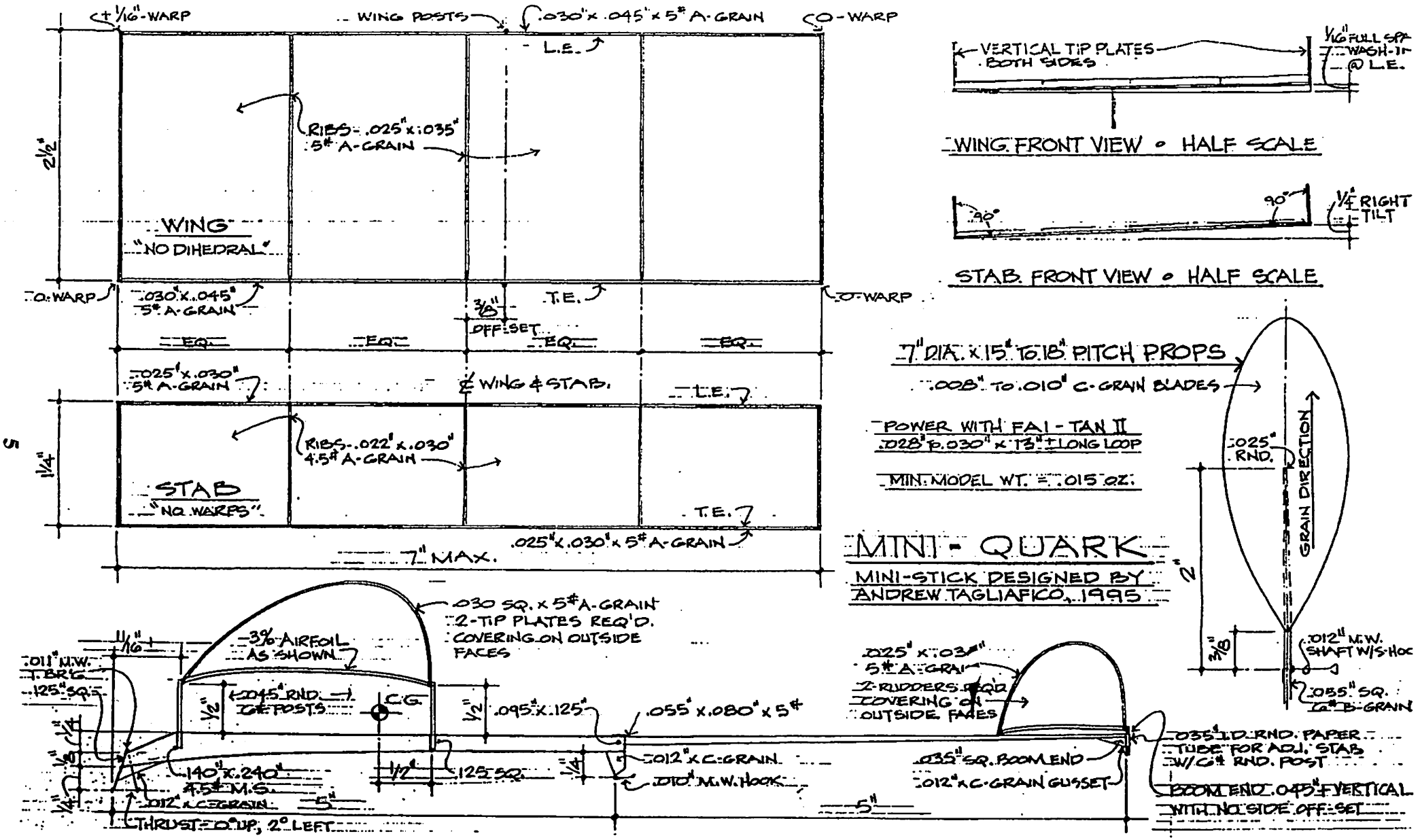
NAME	MODEL	STATIC	FLIGHT
1. Mike Hadland	Tiger Moth	34.5	94
2. Richard Crossley	Speed King	25.5	119
3. Nick Peppiat	Lippisch	25	139
4. Peter Smart	Rollason Beta	28	93
5. Peter Frostick	P-51 Mustang	33.5	46
6. Divs Masters	Sopwith Tri	33.5	46
7. Gordon Hannah	Eastbourne	17	93
8. George Sneed	Piaggio Pc7	19	88
9. Bryan Stichbury	Lacey M10	19	66

NOTE! In Pistachio and Peanut static scores and 2-flight times are given.


13½"
1½"
1¼"
WING OFFSET ½"
2"
1½
MODEL WEIGHT 1.8 GRAMS
RUBBER SIZE .033 X 12"
DIHEDRAL ¼" EACH PANEL
RAISE TIPS TO MAKE 15" SPAN
COVER TIPS AFTER RAISING
ALL STRIPS 1/16" SQUARE
1/16" SQUARE STRIPS - GLUE TO WING - HOLD WING WITH ORTHODONIC BANDS - ALA ARONSTEIN
.015 WIRE PIGTAIL
FUSELAGE 3/32" X 3/16"
.012 WIRE
TAIL BOOM 1/8" TAPER TO 1/16" X 1/32"
BOOM SHOULD HAVE 2° NEGATIVE INCIDENCE
2° LEFT THRUST
1/32" FLAT SHEET
TE
LE
INSET SPAR IN PROP
SET AT 45°
SPAR 3/32° TO 1/32°
PROP SHAFT 1/32" STEEL WIRE
FULL SIZE RIBS - 1/32" SHEET AND PROP
Boom 1/16" WIDE OFFSET ½" FOR LEFT TURN
INTERNATIONAL A-6
JOHN LENDERMAN
JANUARY 1998
GLUE RUDDERS TO TOP OF STAB
1 5/8"
1"
8 7/8"
1¼"
MODIFICATIONS TO #2 MODEL
¾" WING POSTS, .045° MOUNTED ON PAPER TUBES
TAILBOOM TO 7½"
STABILIZER - SHORTEN TO 7½" WITH 5 RIBS
.012 WIRE PIGTAIL

1998 MiniStick Postal Contest

	Name	Corrected Time (sec)	Country	Recorded Time (sec)	Ceiling Height (ft)	Correction Factor
	FIRST OVERALL					
1	Van Gorder, Walt	949.684	USA	548	17.916	1.733
	FIRST USA					
2	Platt, Bob	928.642	USA	442	8.167	2.101
	FIRST INTERNATIONAL					
3	Danjo, Akihiro	917.440	JAPAN	610	29.520	1.504
	SECOND USA					
4	Collins, Walt	859.309	USA	409	8.167	2.101
	THIRD USA					
5	Sova, Tom	830.908	USA	494	20.000	1.682
	SECOND INTERNATIONAL					
6	Inoue, Hirotaka	806.703	JAPAN	443	14.842	1.821
	THIRD INTERNATIONAL					
7	O'Grady, Dan	795.087	CANADA	501	24.580	1.587
8	Slusarczyk, Don	787.176	USA	468	20.000	1.682
9	Clem, Jim	778.766	USA	463	20.000	1.682
10	O'Donnell, John	763.029	UK	447	18.958	1.707
11	Toru, Onishi	761.024	JAPAN	506	29.520	1.504
12	Clem, Jim	750.752	USA	464	23.000	1.618
13	Brocks, Peter	750.057	USA	357	8.167	2.101
14	Raymond-Jones, Colin	747.477	CANADA	471	24.580	1.587
15	Sadayoshi, Tomita	732.448	JAPAN	487	29.520	1.504
16	Mzik, Larry	729.988	USA	434	20.000	1.682
17	Hirotaka, Inoue	727.892	JAPAN	466	25.940	1.562
18	Zuikichi, Fujiwara	719.295	JAPAN	395	14.842	1.821
19	Hacker, Vern	708.122	USA	421	20.000	1.682
20	Mzik, Larry	701.394	USA	417	20.000	1.682
21	Hirishi, Kurihara	699.264	JAPAN	384	14.842	1.821
22	Seizou, Tamai	698.004	JAPAN	414	19.840	1.686
23	Toru, Yatabe	697.856	JAPAN	464	29.520	1.504
24	Sinsuke, Miura	693.344	JAPAN	461	29.520	1.504
25	Kazumasa, Kihara	679.808	JAPAN	452	29.520	1.504
26	Sadayoshi, Tomita	679.458	JAPAN	403	19.840	1.686
27	Olshefsky, Peter	676.062	CANADA	426	24.580	1.587
28	Kazuma, Hara	675.591	JAPAN	371	14.842	1.821
29	Akio, Akahoshi	661.023	JAPAN	363	14.842	1.821
30	Jintarou, Nakao	649.792	JAPAN	416	25.940	1.562
31	Minoru, Fukuda	646.668	JAPAN	414	25.940	1.562
32	Shigeyoshi, Nonaka	645.106	JAPAN	413	25.940	1.562
33	Kelly, James	642.906	USA	306	8.167	2.101
34	Wilson, R.	623.100	UK	335	13.667	1.860
35	Yannick, Grange	621.304	FRANCE	296	8.200	2.099
36	Person, Lee	617.694	USA	294	8.167	2.101
37	Johnson, Tom	617.335	USA	397	26.354	1.555
38	Seizou, Tamai	616.640	JAPAN	410	29.520	1.504
39	Loucka, Larry	615.612	USA	366	20.000	1.682
40	Jintarou, Nakao	602.751	JAPAN	331	14.842	1.821
41	Masatomo, Ooshima	597.288	JAPAN	328	14.842	1.821
42	Wilson, R.	578.160	UK	365	24.750	1.584
43	Van Gorder, Walt	574.131	USA	633	130.000	0.907
44	Noboru, Omata	573.254	JAPAN	367	25.940	1.562
45	Hanford, Robert	567.926	USA	443	49.000	1.282
46	Shoji, Kaneko	560.992	JAPAN	373	29.520	1.504
47	Mzik, Larry	546.921	USA	603	130.000	0.907
48	Singer, Len	537.856	USA	256	8.167	2.101
49	Krause, Larry	511.518	USA	399	49.000	1.282
50	Minoru, Iida	503.840	JAPAN	335	29.520	1.504
51	Green, Wayne	485.331	USA	231	8.167	2.101
52	Sullivan, Ed	458.018	USA	218	8.167	2.101
53	Kosaku, Yamada	449.787	JAPAN	247	14.842	1.821
54	Van Dover, Abram	447.513	USA	213	8.167	2.101
55	Monk, Ken	446.244	USA	492	130.000	0.907
56	Henderson, W.	409.057	USA	451	130.000	0.907
57	Hideharu, Suzuki	407.584	JAPAN	271	29.520	1.504
58	Archer, Ed	402.708	USA	444	130.000	0.907
59	Schutzel, Emil	398.080	USA	256	26.354	1.555
60	Haro, Fernando	347.880	SPAIN	260	43.000	1.338
61	Neff, V	324.706	USA	358	130.000	0.907
62	Sova, Tom	324.706	USA	358	130.000	0.907
63	Junichi, Watanabe	323.856	JAPAN	208	26.240	1.557
64	Font-Bellot, Luis	307.740	SPAIN	230	43.000	1.338
65	Steep, Don	296.589	USA	327	130.000	0.907
66	Gagliano, Vic	288.864	USA	144	10.000	2.006
67	Takashi, Terao	280.260	JAPAN	180	26.240	1.557
68	Eiji, Endou	119.889	JAPAN	77	26.240	1.557
69	Sadami, Takahashi	110.547	JAPAN	71	26.240	1.557


+1/16"-WARP
WING POSTS
.030"x.045"x5# A-GRAIN
0-WARP
L.E.
RIBS-.025"x.035" 5# A-GRAIN
2½"
WING
"NO DIHEDRAL"
0-WARP
.030"x.045" 5# A-GRAIN
3/8" OFF-SET
T.E.
0-WARP
EQ.
EQ.
EQ.
EQ.
.025"x.030" 5# A-GRAIN
℄ WING & STAB.
T.E.
1¼"
RIBS-.022"x.030" 4.5# A-GRAIN
STAB
"NO WARPS"
T.E.
.025"x.030"x5# A-GRAIN
7" MAX.
VERTICAL TIP PLATES BOTH SIDES
1/16" FULL SPAN WASH-IN @ L.E.
WING FRONT VIEW • HALF SCALE
90°
90°
1/4" RIGHT TILT
STAB. FRONT VIEW • HALF SCALE
7" DIA. x 15" TO 18" PITCH PROPS
.008" TO .010" C-GRAIN BLADES
POWER WITH FAI-TAN II
.028" D. .030" x 13" LONG LOOP
MIN. MODEL WT. = .015 OZ.
MINI-QUARK
MINI-STICK DESIGNED BY ANDREW TAGLIAFICO, 1995
.025" RND.
GRAIN DIRECTION
2"
3/8"
.012" M.W. SHAFT W/S-HOOK
.055" SQ. 5# B-GRAIN
.030 SQ. x 5# A-GRAIN 2-TIP PLATES REQ'D. COVERING ON OUTSIDE FACES
3% AIRFOIL AS SHOWN
1/16"
.011" M.W. BRG.
.125" SQ.
.045" RND. DOWEL POSTS
½"
C.G.
½"
.095"x.125"
.055"x.080"x5#
.025"x.03" 5# A-GRAIN
2-RUDDERS REQ'D COVERING ON OUTSIDE FACES
.035" I.D. RND. PAPER TUBE FOR ADJ. STAB W/C# RND. POST
.140"x.240" 4.5# M.S.
.012" x C-GRAIN
.125 SQ.
.012" x C-GRAIN
.010" M.W. HOOK
.035" SQ. BOOM END
.012" x C-GRAIN GUSSET
BOOM END .045" ± VERTICAL WITH NO SIDE OFF-SET
5"
5"
THRUST = 0° UP, 2° LEFT

MIDWINTER CONTEST

Enschede, The Netherlands, 20 dec. 1998

The Kottenpark Aeromodelling Club invites you to participate in a contest for indoor models. The contest will be run in two halls of the sporting accommodation of the Twente University.

You are invited specially to take some juniors with you. These juniors can compete in a separate contest.

The Contests

In Hall 1 two Open Dutch Championships will be run: Sainte Formule for the René Jossien Challenge Cup and F1D-Beginner for the Kottenpark Challenge Plaquette.
In Hall 2 the juniors can compete with a one-design "Moustique" F1D-Beginner model, a Bostonian and with the model (F)looper. Also a pylon race competition will be run. (Juniors having a F1D-Beginner (non-Moustique) or a model Sainte Formule can compete in the championships in Hall 1).

The Halls

Both halls measure 42x24x10 m. The ceiling is smooth. On one side is a gallery. It was established that the halls are very suitable for indoor flying in winter time.

Stay the night

Participants who would like to arrive on Saturday (night) can pass the night in:
1. The building of Kottenpark College. Showers and possibility of cooking is available. The workshop of the school aeromodelling club and the gym hall can be used. Video's can be watched.
2. A hotel in Hengelo or Enschede.

Fees

Juniors hfl 7,50; students hfl 12,50; seniors hfl 25,00. Passing the night in Kottenpark building: hfl 7,50.

More information

Internet:
http://www.smc.nl/stedelijklyceum/modelbouw.htm
Ebele Schouwstra, Vijverlaan 6, 7553CA Hengelo(O), tel/fax 074-2420393.
** Drawings or materials for the models Moustique, Bostonian, (F)looper or Pylonracer will be sent on request.*

52th Argentine Indoor Nationals

The 1998 Argentinian National Indoor Championships will be held in the city of Santa Fe during August 14, 15 and 16 at the National Technological University stadium. The site area is 30m x 50m; with 14 mts height. These are the contest categories:

F1D, EZB, Peanut, LAMI (hand launched glider), Mini Stick, PIR (Indoor hand towed glider), Argentine Formula, P 25, Little Duck, MIP.

Also there is a special Trophy: "Rare Plane" dedicated to ornithopters, biplanes, bimotors, tandems, canards, etc. Information: see diary.

INDOOR CHAMPIONSHIP OF VALENCIA

Report by Daniel Medina (ESP)

These championships took place on 30/31 May 1998 in the sport pavilion The Campelló (Alicante). Height: 9.6 meters.

On Saturday the first championship in Spain for Scale models was held with many and good built models of traditional form (Balsa and paper). Highlights were the beautiful flights of the Spanish Fury and the Fokker E.III, as well as the models of the Sr.Moreno.

The Sunday was reserved for the categories F1D and F1D-B. In very good conditions of flight almost all the participants improved their anterior times of flight. Highlight of the day was the new record from Spain in F1D gotten by Daniel Medina with 14' 43". There was also some good competition in the F1D-B category.

INDOOR SCALE

NAME	STATIC	PLUS	FLIGHTS 1	2	3
1. Juan José Haro (Fury)	24.5	12	30	25	27
2. Juan Moreno (Cougar)	18.5	5	34	7	38
3. Fernando Haro (Morane)	20	6	22	31	
4. Luis Font (Fokker E.III)	23	8	18		
5. Fernando Haro (Fred)	22	6	14	17	
6. Fernando Haro (P-51)	18.5	10	8	13	
7. Juan Moreno (Fike)	21.5	5	9	14	13
8. Enrique Lledó (Chipmunk)	16.5	10	12		
9. Enrique Lledó (Piper cub)	20	5	13		
10. Fernando Haro (Macchi)	17.5	10	7		
11. Fernando Haro (Buzzard)	19	12			
12. Juan Moreno (Pietempol)	25	8			
13. Luis Font (Eastbourn)	20.5	8			

F1D

N°	NAME	FLIGHT 1	FLIGHT 2	TOTAL
1	Daniel Medina	728	883	1.611
2	Fernando Haro	369	395	764
3	Luis Font	333	285	618

F1D-B

N°	NAME	FLIGHT 1	FLIGHT 2	TOTAL
1	Daniel Medina	501	472	973
2	Juan Moreno	499	442	941
3	Luis Font	323	383	706
4	Fernando Haro	326	333	659

Note: the report and the photos are in the following address:
http:// www.geocities.com/colosseum/field/ 6082/ indoor98.html

MICRO AIR VEHICLES

THE NEW MODEL AEROPLANES

by Reg Boor (GBR)

In the July issue of the U.K. Royal Aeronautical Society house journal "Aerospace International" is a report, by Chris Male, of a recent international conference at Bristol University on Remotely Piloted Vehicles, or RPV's. There have been many of these conferences at Bristol over the years and the reports on them often contain much of interest to the aeromodeller, as the aircraft described are small, operate at low Reynold's Number and many of them are of unusual design and geometry.

But this time there was something new and I have permission from the RAeS to quote in full the relevant two paragraphs from the report which I feel sure all of you will find interesting, if not astounding ! Here goes....:"In 1992 Rand began studies of micro air vehicles (MAV's), UAV's with a maximum dimension of 6 inches (15 cm), the smallest size considered capable of performing a useful mission, according to Harry Berman, US Defense Advanced Research Projects Agency (Darpa). These would have a useful payload of 1 - 18gm, an endurance of 20 - 60 minutes, a range of up to 6.2 miles (10 km) (12.4 miles or 20 km if expendable) and a speed of 10 - 20 m/s.

MAV's have the advantage of being light, affordable, covert and with minimum logistics. They open up many completely new missions, including use in urban environments at street level and even inside buildings. There are many technical challenges (including propulsion and power, multifunctionality of components and automation) but contracts for enabling technologies have been let."

End of quotation. I guess that UAV means unpiloted air vehicle. The mind, as they say, boggles.

Note from T.A.: a lot of information can be found on the Internet. A search on "Micro Air Vehicles" will lead you to the DARPA projects, the MLB company which sells MAV's and even this "Entomopter" project!



Concours international de Vol Libre d'intérieur.
ORLEANS 20 et 21 Juin 1998

F1D Beginner

Pl	Nom et prénom	Club ou nation	Vol 1	Vol 2	Vol 3	Vol 4	Vol 5	Vol 6	Total
1	BAILEY Bob	Great Britain	12.08	15.06	-	15.49	15.42	-	31.31
2	VALERY Jacques	AC Landes	3.01	12.43	11.49	3.36	14.32	15.11	29.43
3	KELLER Peter	Suisse	15.47	10.04	-	13.48	2.11	8.17	29.35
4	HUA NGOC Trung	ASCPA	11.47	10.41	13.17	9.13	9.22	6.20	25.04
5	CHAMPION Robert	CA Touraine	8.57	10.24	11.31	11.57	11.26	11.18	23.28
6	LEFEVER Geoffrey	Great Britain	11.04	7.33	10.15	3.42	3.40	8.31	21.19
7	ROCH Edmond	AAML	9.57	5.42	8.44	5.37	6.55	10.26	20.23
8	YRONDE François	Aérospatiale Acq	9.11	2.13	3.19	4.18	8.40	9.25	18.36
9	PAILHE Pierre	AA Pénaud	4.18	7.58	1.45	2.29	7.53	8.12	16.10
10	DUPUIS Michäel	UA Orléans VL	4.50	3.10	1.39	5.58	5.09	1.01	11.07
11	DARROUZES J Pierre	ASCPA	-	-	-	5.49	3.12	2.00	9.01

F1L EZB

Pl	Nom et prénom	Club ou nation	Vol 1	Vol 2	Vol 3	Vol 4	Vol 5	Vol 6	Total
1	BAILEY Bob	Great Britain	6.56	7.02	0.00	12.21	15.30	16.09	31.39
2	ROCH Edmond	AAML	11.54	12.28	-	12.35	15.06	13.40	28.46
∞ 3	VALERY Jacques	AC Landes	1.03	14.05	2.10	13.11	13.28	2.33	27.33
4	TIPPER John Kevin	Great Britain	10.48	4.18	10.39	3.55	13.30	13.42	27.12
5	CHAMPION Robert	CA Touraine	9.30	3.25	11.00	10.01	10.22	12.33	23.33
6	GRANGE Yannick	AAML	9.24	3.01	1.53	11.02	10.51	10.20	21.53
7	LEFEVER Geoffrey	Great Britain	4.40	5.12	4.11	9.19	12.06	4.33	21.25
8	FRUGOLI J Francis	MAC Marseille	1.58	7.41	2.06	10.40	5.08	10.36	21.16
9	YRONDE François	Aérospatiale Acq	3.24	6.29	9.14	2.45	4.27	9.27	18.41
10	MORICEAU Bertrand	SAM	-	-	-	6.44	2.45	8.11	14.55
11	POURIAS Fabien	SAM	1.24	6.55	-	5.02	5.39	5.13	12.34
12	DE MONCUIT Grégoire	UA Orléans VL	4.00	2.14	2.49	2.10	-	-	6.49

F1D Microfilm

Pl	Nom et prénom	Club ou nation	Vol 1	Vol 2	Vol 3	Vol 4	Vol 5	Vol 6	Total
1	BAILLEY Bob	Great Britain	28.16	28.44	10.40	22.32	34.01	-	1.02.45
2	TRACHEZ André	CA Azay le brûlé	5.04	26.41	21.12	4.28	1.18	3.32	47.53
3	COGNET Guy	AC Poitou	7.10	21.40	24.23	1.29	5.40	6.55	46.03
4	CHAMPION Robert	CA Touraine	20.03	21.49	1.50	20.03	4.50	18.38	41.52
5	VALERY Jacques	AC Landes	0.23	0.53	16.34	8.58	7.36	22.47	39.21
6	TIPPER John Kevin	Great Britain	5.19	-	-	20.39	18.38	-	39.17
7	KELLER Peter	Suisse	14.20	10.14	17.03	21.34	12.29	5.13	38.37
8	FRUGOLI Jean Françis	MAC Marseille	18.02	5.38	4.28	7.02	-	-	25.04

Micro 35 Senior

Pl	Nom et prénom	Club ou nation	Vol 1	Vol 2	Vol 3	Vol 4	Vol 5	Vol 6	Total
1	TIPPER John Kevin	Great Britain	4.35	5.29	12.13	18.49	4.36	19.14	38.03
2	FRUGOLI J Francis	MAC Marseille	17.15	17.19	14.37	13.19	14.25	-	34.34
3	POURIAS Fabien	SAM	9.54	10.50	13.18	12.58	14.10	13.22	27.32
4	CHAMPION Robert	CA Touraine	8.30	10.25	14.02	12.18	4.37	-	26.20
5	COGNET Guy	AC Poitou	12.04	11.13	12.41	11.51	4.03	8.29	24.32
6	PENNETIER Frédéric	AC Poitou	0.46	3.20	-	10.52	4.01	13.00	23.52
7	HUA NGOC Trung	ASCPA	7.12	8.29	-	8.23	3.02	15.13	23.42
8	TRACHEZ André	CA Azay le Brûlé	12.37	7.49	11.00	3.24	8.51	9.20	23.37
9	PAILHE Pierre	A A Pénaud	4.14	8.49	9.53	8.26	0.30	11.10	21.03
10	GRANGE Yannick	AAML	6.28	7.08	-	2.40	-	-	13.36
11	MORICEAU Bertrand	SAM	-	-	-	6.05	4.08	6.43	12.48
12	DARROUZES J Pierre	ASCPA	2.35	2.41	-	4.53	4.50	3.29	9.43
13	TIERCELIN J Marc	SAM	-	-	-	1.46	4.31	3.16	7.47
14	ROCH Edmond	AAML	3.33	-	-	-	-	-	3.33

Micro 35 Cadet

Pl	Nom et prénom	Club ou nation	Vol 1	Vol 2	Vol 3	Vol 4	Vol 5	Vol 6	Total
1	YRONDE Clément	Aérospatiale Acq	2.10	5.36	5.45	3.15	6.42	6.57	13.39
2	VALLE Thomas	UA Orléans VL	-	-	-	5.28	6.32	4.18	12.00
3	TIERCELIN Marie	SAM	-	-	-	5.09	5.59	1.10	11.08
4	GAUTIER Stanislas	UA Orléans VL	-	-	-	5.10	5.51	2.32	11.01
5	DESPRES Matthieu	UA Orléans VL	-	-	-	4.25	4.48	1.06	9.13
6	LERAY Nicolas	SAM	-	-	-	2.18	1.57	6.42	9.00
7	CHATIN Benoît	SAM	1.44	1.56	2.05	2.35	5.36	3.17	8.53
8	DEBARD Julien	UA Orléans VL	2.12	4.18	2.33	4.28	3.07	3.55	8.46
9	DRONNEAU Jonathan	SAM	0.00	1.29	2.19	3.54	2.58	3.47	7.41
10	GUIMBRETIERE E	SAM	2.30	2.41	2.58	1.30	3.57	3.20	7.17
11	TOUZE Mathieu	SAM	-	-	-	1.47	2.48	4.20	7.08
12	TIERCELIN Jérôme	SAM	-	-	-	1.13	2.05	3.32	5.37

Micro 35 Junior

Pl	Nom et prénom	Club ou nation	Vol 1	Vol 2	Vol 3	Vol 4	Vol 5	Vol 6	Total
1	MAGDELEINE Sylvain	UA Orléans VL	7.47	6.36	7.10	3.02	6.00	7.03	14.57
2	BURGOT Laurent	UA Orléans VL	5.19	6.48	7.05	6.16	1.23	6.08	13.53
3	DE MONCUIT Grégoire	UA Orléans VL	2.10	0.00	-	5.41	2.10	6.40	12.21
4	MARTINEAU Alban	SAM	5.19	5.19	2.33	4.20	2.32	6.25	11.44
5	DUBRAY Aymeric	UA Orléans VL	3.45	3.12	-	2.44	4.58	6.10	11.08
6	CHEVALIER Thibaud	ASCPA	3.19	5.41	4.29	1.23	2.58	0.53	10.10
7	DUPUIS Mickaël	UA Orléans VL	3.04	5.00	-	3.16	4.27	-	9.27
8	CHERON Samuel	UA Orléans VL	4.22	4.30	1.20	-	-	-	8.52
9	NAIVIN Michäel	ASCPA	2.45	-	-	4.55	2.02	-	7.40

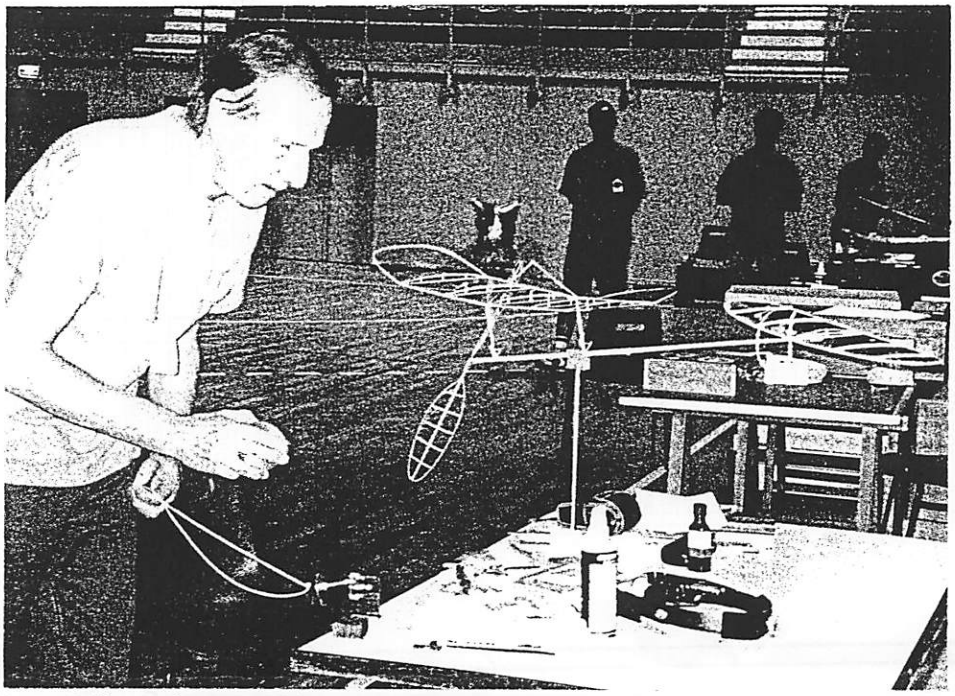
Merci de votre participation et à l'année prochaine

Thank you for coming and see you next year

ORLEANS INTERNATIONAL 1998

Report by Trung Hua Ngoc

This years international indoor competition of Orleans attracted entries from only two foreign countries: Great Britain and Switzerland. Bob Bailey was above all the other contestants. He was classed first in 3 categories! Peter Keller was unlucky, many of his flights finished in the centre lights.



Peter Keller and F1D model

Among his models were two delightful all paper planes which looked great and can fly more than 2 minutes. Jacques Valery had a True Tandem (B. Hunt's F1D) covered with Poly Micro. In spite of the weight handicap he made very good flights. John Tipper also had a True Tandem, but his was a 35cm design which flew magnificently. He finished first in the Micro 35 category.

1998 ALL JAPAN F1L CONTEST

Report by Akihiro Danjo (JPN)

This competition was held on May 4 in the ToDo-RoKi Arena (20m ceiling) in Kawasaki City. Outdoor temperature was normal (18°C) and indoors the conditions were good. I could start with good flights in round 1 and 2, then I decided to run some risks after this. The ceiling is very catchy because lamps, speaker boxes, cables and trusses are hanging. But I could make a SUPER LUCKY flight (21'13)) in round 4. It is an incredible flight considering the ceiling height.

F1L (16 flew)

Name	Best 2 of 5		Total
1. Akihiro Danjo	19'50	21'13	41'03
2. Masatoshii Misawa	19'57	19'16	39'13
3. Shinsuke Miura	15'22	17'06	32'28
4. Noboru Omata	14'43	16'29	31'02
5. Minoru Iida	14'49	14'03	28'52
6. Kenjirou Hashimoto	13'25	14'34	27'59

1998 Japanese F1D National Championships

Report by Akihiro Danjo (JPN)

The 1998 Japanese F1D Championships were held on July 19-20 in the Yamabiko Dome (34m ceiling) in Matsumoto City again. The air conditions were good and the winning time of 44'55 by Hideyo Enomoto is a new Japanese F!D (65cm) record. It is an excellent record considering the fact that the hall is situated at 600 m above sea level.

F1D (6 flew)

Name	Best 2 of 6		Total
1. Hideyo Enomoto	44'55	43'34	88'29
2. Kasumasa Kihara	41'06	38'40	79'46
3. Youichi Ichiyama	33'32	33'10	66'42
4. Yasutaka Tanaka	32'58	30'20	63'18
5. Toshiaki Okada	33'05	27'50	60'55
6. Susumu Tanaka	21'49	19'47	41'36

The (F)looper

Elsewhere in this issue you will find an article about the (F)looper, a beginners model with which we have had a lot of such success over the past few years in Holland. You are encouraged to use this article for helping juniors and you are free to copy and distribute it as you like, newsletter editors included!

A competition for this class is also included in the program for this years international Midwinter Contest in Holland, see details elsewhere in this issue.

Concours de Vol d'Intérieur

10 May 1998, Vélodrome de Bordeaux, France; Ceiling height 35 m

Concours de Vol d'Intérieur du 10 Mai 1998 Vélodrome de Bordeaux

F1D Beginner

	vol 1	vol 2	vol 3	vol 4	vol 5	vol 6	total	clas
Hua Ngoc Trung	10:35	12:35	12:23	12:55			25:30	1
Carles Maurice	09:10	11:26	08:00	09:07			20:36	2
Néraudeau Francis	07:20	08:27	09:30				17:57	3
Riffaud Louis Pierre	03:27	07:22	08:36	08:30	06:34	07:20	17:06	4
Dao Cong Thang	04:41	05:10	05:08	07:34	08:27		16:01	5
Delteil Raoul	06:15	06:47	06:25				13:12	6
Yronde François	05:33						05:33	7
Hervieu Benoit	02:06	02:25	02:39				05:04	8

EZB

Grangé Yannick	11:48	11:37	06:51	11:02			22:50	1
Carles Maurice	09:55	09:15	10:18				20:13	2
Hua Ngoc Trung								

Micro 35 Senior

Hua Ngoc Trung	13:57	14:17	16:22	16:06	17:16		33:38	1
Cognet Guy	13:30	17:55	14:20	04:21			32:15	2
Bautz Emmanuel	10:08	10:23					20:31	3
Yronde François	06:28	07:51	08:14				16:05	4
Pailhé Pierre	06:54	07:21	05:35	07:18	07:30		14:51	5
Grangé Yannick	08:21	06:07					14:28	6
Nalvin Michael	06:32	06:27	04:26				12:59	7
Dao Cong Thang	04:37	05:16	04:01	06:03	06:21		12:24	8
Fritz Maurice	02:20	02:00					04:20	9
Bournous Jean Louis	02:42						02:42	10

Micro 35 Junior

Levayer Erwan	04:56	06:47	07:40	05:44			14:27	1
Kwiatkowski Mathieu	03:00						03:00	2
Dubroca Claire	01:41						01:41	3

Micro 35 Cadet

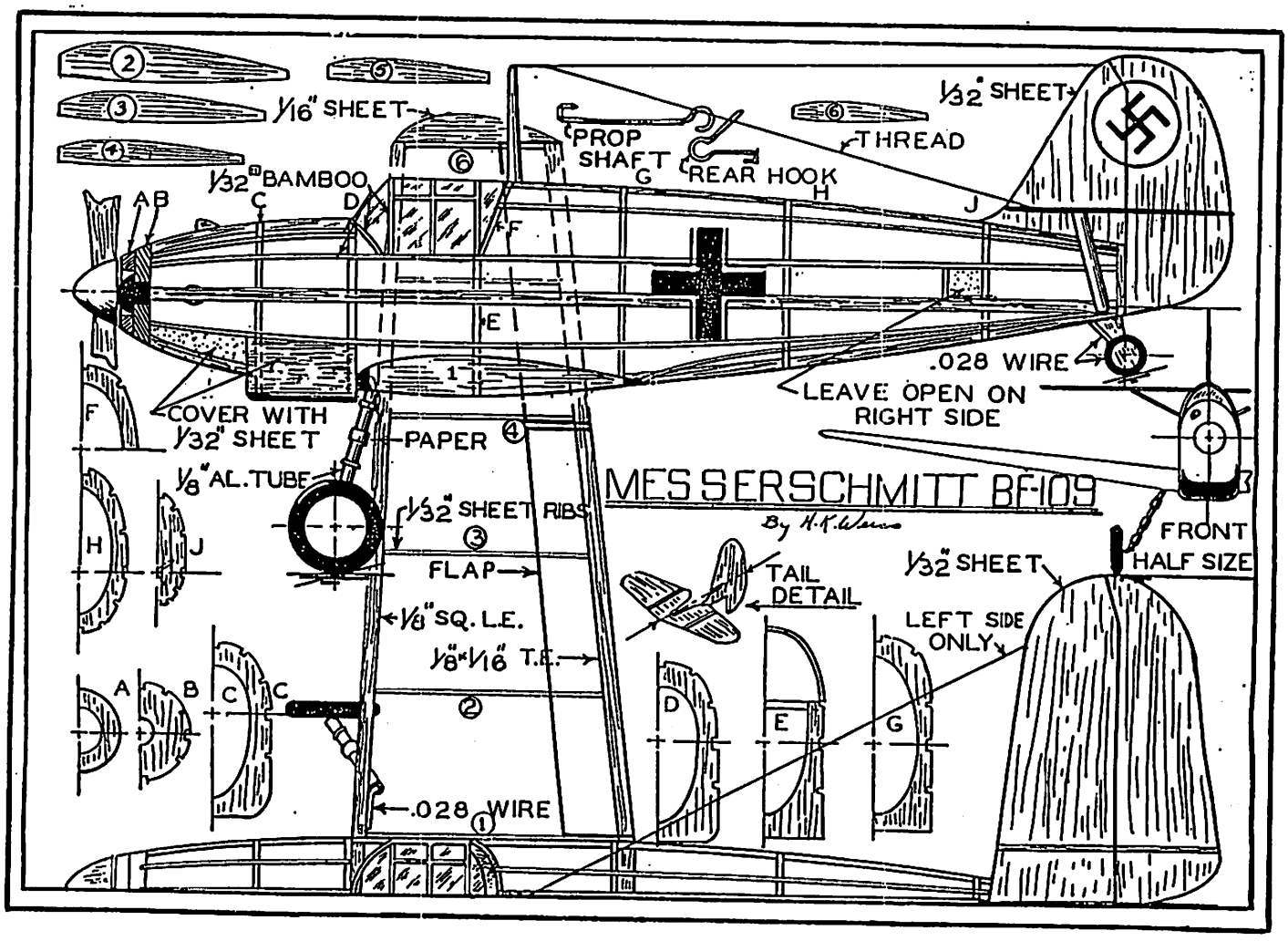
Yronde Clément	04:50	06:12	05:26	06:13	06:48	07:02	15:15	1

Cacahuètes

Pénetier Frédéric	00:42	00:57					01:39	1
Bautz Emmanuel	00:27	00:45	00:51	00:24			01:36	2
Gallet Pierre	00:27	01:03					01:30	3
Pailhé Pierre	00:24	00:24	00:30	00:30	00:29		01:00	4
Chevalier Thibaud	00:29	00:30	00:21	00:22			00:59	5

Ste Formule Senior

Bautz Emmanuel	03:05	03:09	03:26	03:53	03:56		07:49	1
Yronde François	02:05	03:12	03:26	03:20			06:48	2
Yronde Clément	02:03	02:41					04:44	cadet
Gallet Pierre	01:15	01:16	01:03				02:31	3
Pénetier Frédéric	02:24						02:24	4
Chevalier Thibaud	00:55	01:00					01:55	5
Levayer Erwan	01:15						01:15	junior



The (F)looper

design: David Lentink and Ebele Schouwstra (NED)

"(F)looper" is the Dutch follow-up to the very successful American "Delta Dart" design, which originally introduced me into indoor modelling! Because Ebele Schouwstra (who runs a big school modeling group) wanted a simple beginnersmodel for his club, he asked me to design and build a model to his specifications. The model should have a triangular wing shape in order to prevent wing warps as much as possible. In addition the design should meet the following requirements:

- low flight speed
- good climb characteristics (not as powerful as a "Dart")
- longer flight time than the Dart
- stable flying behaviour.

These goals were met by using a large asymmetric wing, but still with low aspect ratio in order to maintain a reasonably wide chord near the tip. The big area assured a low wing loading. We chose a long tail moment arm, a feature which Ebele and I strongly support and which you will find in most of our beginners designs. After a few test flights it was clear that the model was a good design and we introduced it as one of the first models a beginner builds when he joins our club.

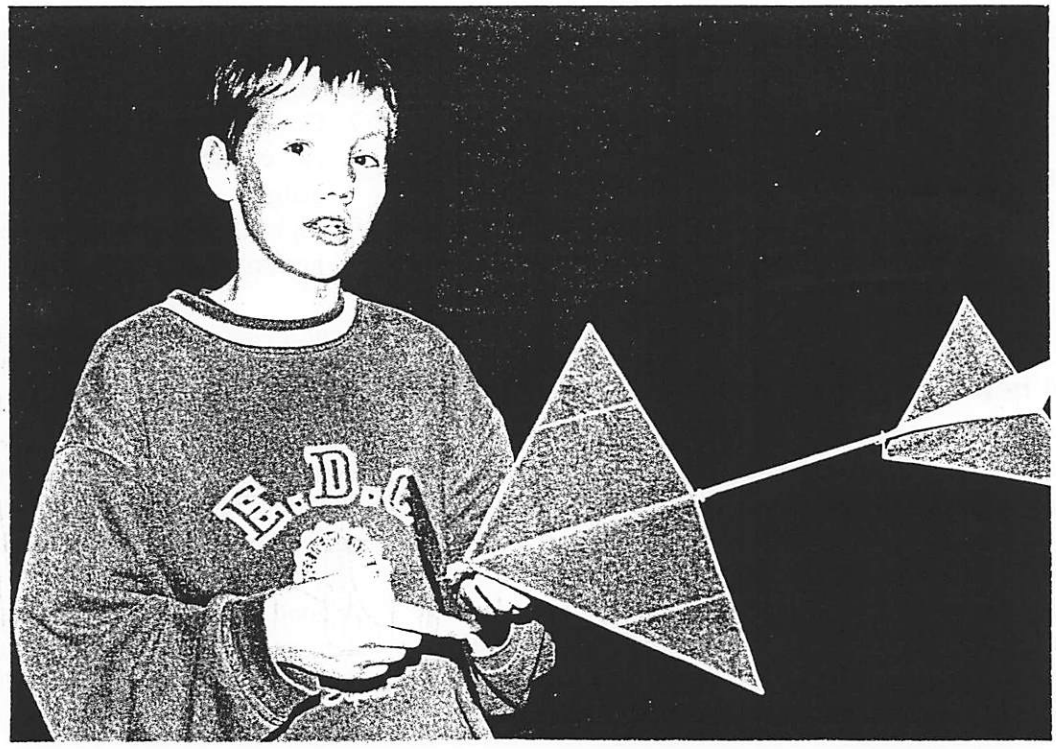
About the construction

The rear hook and the propeller bearing are distinctly different from other beginners models. This design is much easier to make. The somewhat larger friction in the plywood bearing doesn't noticebly influence the models performance. The wing should be glued to the fuselage with regular balsa cement. All other parts are glued with thinned down balsa cement. The plywood bearing is best glued with aliphatic wood glue! The propeller is from plastic and weighs only 2,6 grams. This is one of the reasons for the fine performance of this model. It is important to avoid brittle wood for the motorstick (density ±14 gr/cm^3). The paper covering should be ironed before applying it to the wing frame. Otherwise it will shrink later and distort the wing shape.

Specificly for this model we designed a special spar cutting tool, which allows a beginner to cut tapered spars easily. Against one side of a base block a plywood stop-block is glued, one at each end, which has a cut-out in it with the same width as the spar width to be cut. Cutting a spar is done as follows: cut a sheet of balsa to exact length of the spar and lay it on the jig. Shift it between the cut-outs and against the stops. Position a steel ruler along the stop-blocks and cut the spar with a razor blade. The razor blade slides along the outside of the baseplate hardly touching it and it cuts through the balsa in a single pass. For the (F)looper you need two different cutting tools, one for a spar tapering from 4 mm to 1,5 mm and one for straight spars of 1,5 mm width.

Flying

Since its introduction several hundreds of (F)loopers have been built. A beginner easily overlooks the asymmetric shape of the wing and can apply the covering on the wrong side of the wing. Even when the wing is glued to the fuselage the wrong way around, the model still flies. You may need a simple trim tab to correct the flight pattern. When you spot the problem early enough you can also glue the wing top-side down with the



spars on the upper side. Will have no influence on performance! The only modification which might be considered is lenghtening the motorstick a little to allow longer rubber motors. You should then also increase its cross section or choose harder wood.



Although the model usually flies straight from the board it can still be necessary to put some more up elevator into the stab. Continue decreasing the stabilizer incidence till the model flies close to stalling and than go back a little. The model is fairly insensitive to down-thrust. When you give the model a lot of up elevator it will fly loopings under high torque. You could oppose this with downthrust, but I have not tried that. And why should you? After the loop there will be a wingover, and the model will continue to climb as if nothing has happened! This is where the FUN part enters and where the kids enjoy this model most. The model doesn't perform loopings easily, but it sure CAN do it when you make the proper trim adjustments. In our competitions we have introduced a bonus of 15 seconds for each looping performed during a flight! Believe me, this gets the kids going!

You may be amazed by this story, but the models flying characteristics are really great. It recovers easily from the most weird positions and still is fairly insensitive to changes in trim. The model is easy enough to build for 8-9 year old kids. Average flights are about 90 seconds but the record is already over 2 minutes. These times have been achieved in 8 meter ceiling sports halls. Some kids have also flown the model outdoors, but don't do this on your local sports field! We have seen 8 minute thermal flights.....!

A new beginners class?

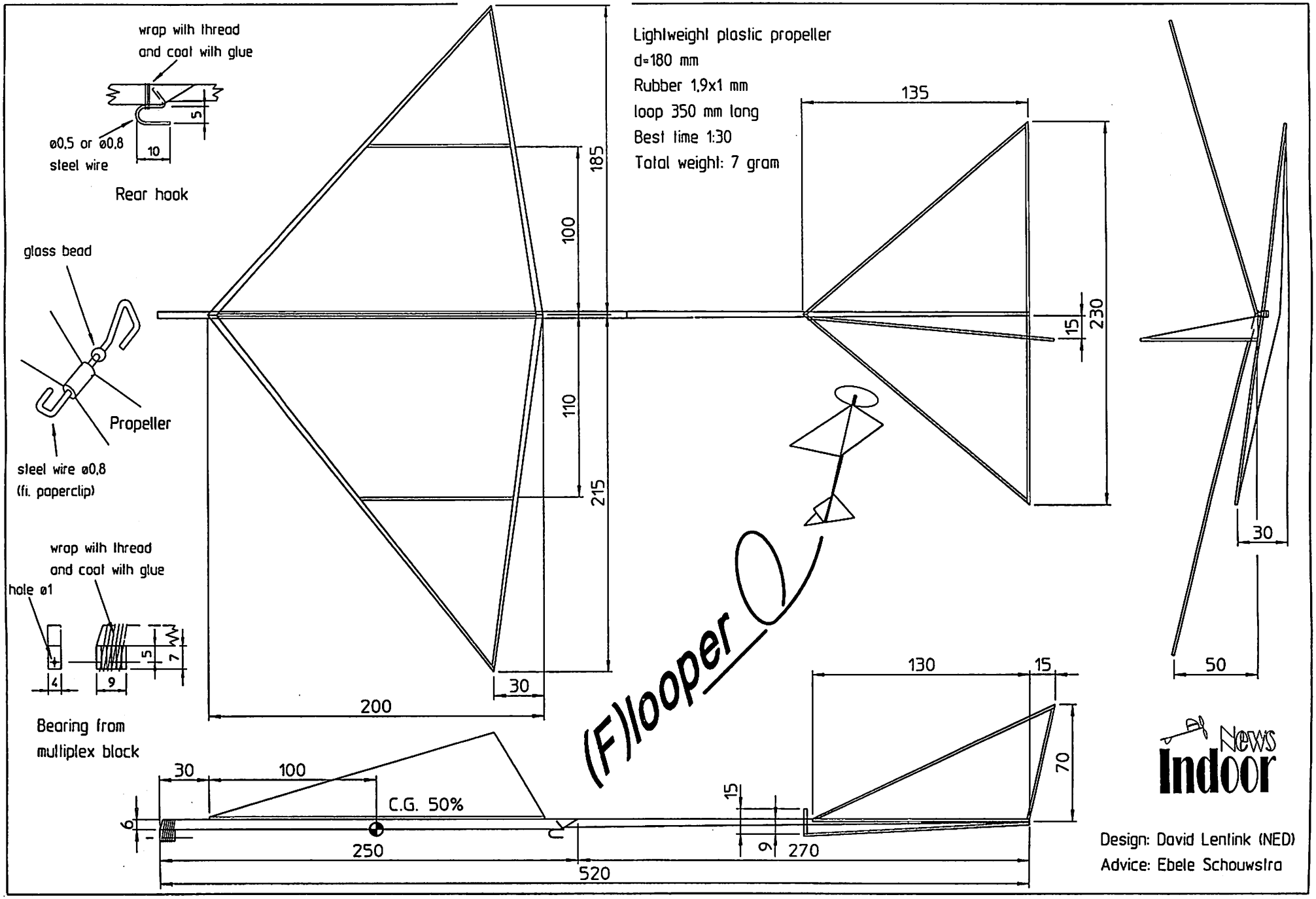
After four years the (F)looper class is now an established beginners class in Holland. Only juniors up to 18 years may enter competitions. Many special beginner classes have been introduced over the years. Not all of them fully achieved their goals. For instance because some experts (to mention just something extreme) started to twist and carve on the plastic propellers..... It is impossible to create a true beginners class as long as you allow experts into the competition. Even in this (F)looper class we 'gently' encourage the more talented fliers to move on to F1M or other classes when they start to dominate the competitions.

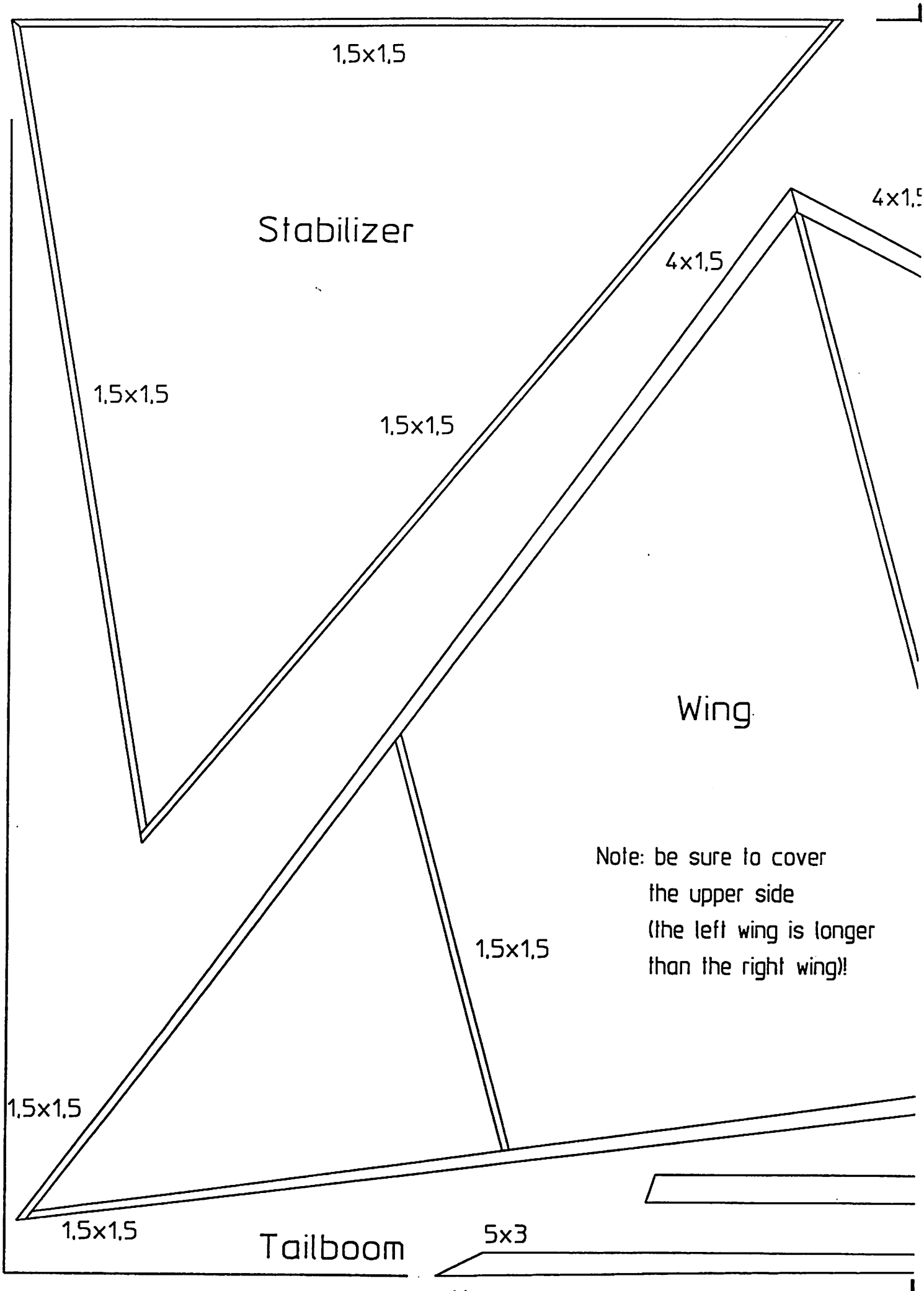
The rules for the (F)looper class are as follows:

1. Wing: triangular or diamond shape, max. span 40 cm, max. area 400 cm^2, flat airfoil section
2. Stabilizer: triangular shape, max. area 40% of wing area, flat airfoil section
3. Fin: triangular shape, flat airfoil section
4. Propeller: plastic, commercially available, not modified in any way except for drilling the center hole
5. Fuselage plus tailboom length: max. 60 cm
6. Minimum weight without rubber: 7 gram
7. Covering: paper only
8. No exotic materials, VP, VD props or other gadgets
9. Flying: 15 seconds bonus for every looping performed during the flight!

A propeller which suits the (F)looper perfectly is sold by SAMS. This is a 7" Sleek Streek propeller, diameter 180 mm and weight is only 2,6 grams. Address: SAMS, The Chapel, Sandon, Buntingford, Herts, SG9 0QJ, United Kingdom, tel.: 01763 287606, fax: 01763 288490, e-mail: aeroplanes@samsmodels.demon.co.uk

A good alternative is the 7" silver Peck propeller, item nr. PA022. Peck-Polymers, P.O. Box 710399, Santee CA 92072, USA, phone (619)448-1818, fax (619)448-1833,. E-mail: PPModels@aol.com.


wrap with thread
and coat with glue
ø0,5 or ø0,8
steel wire
5
10
Rear hook
glass bead
Propeller
steel wire ø0,8
(fi. paperclip)
wrap with thread
and coat with glue
hole ø1
5
7
4
9
Bearing from
multiplex block
Lightweight plastic propeller
d=180 mm
Rubber 1,9x1 mm
loop 350 mm long
Best time 1:30
Total weight: 7 gram
185
100
110
215
30
200
135
15
230
30
50
130
15
70
(F)looper
News
Indoor
30
100
C.G. 50%
250
520
6
1
15
9
270
Design: David Lenlink (NED)
Advice: Ebele Schouwstra

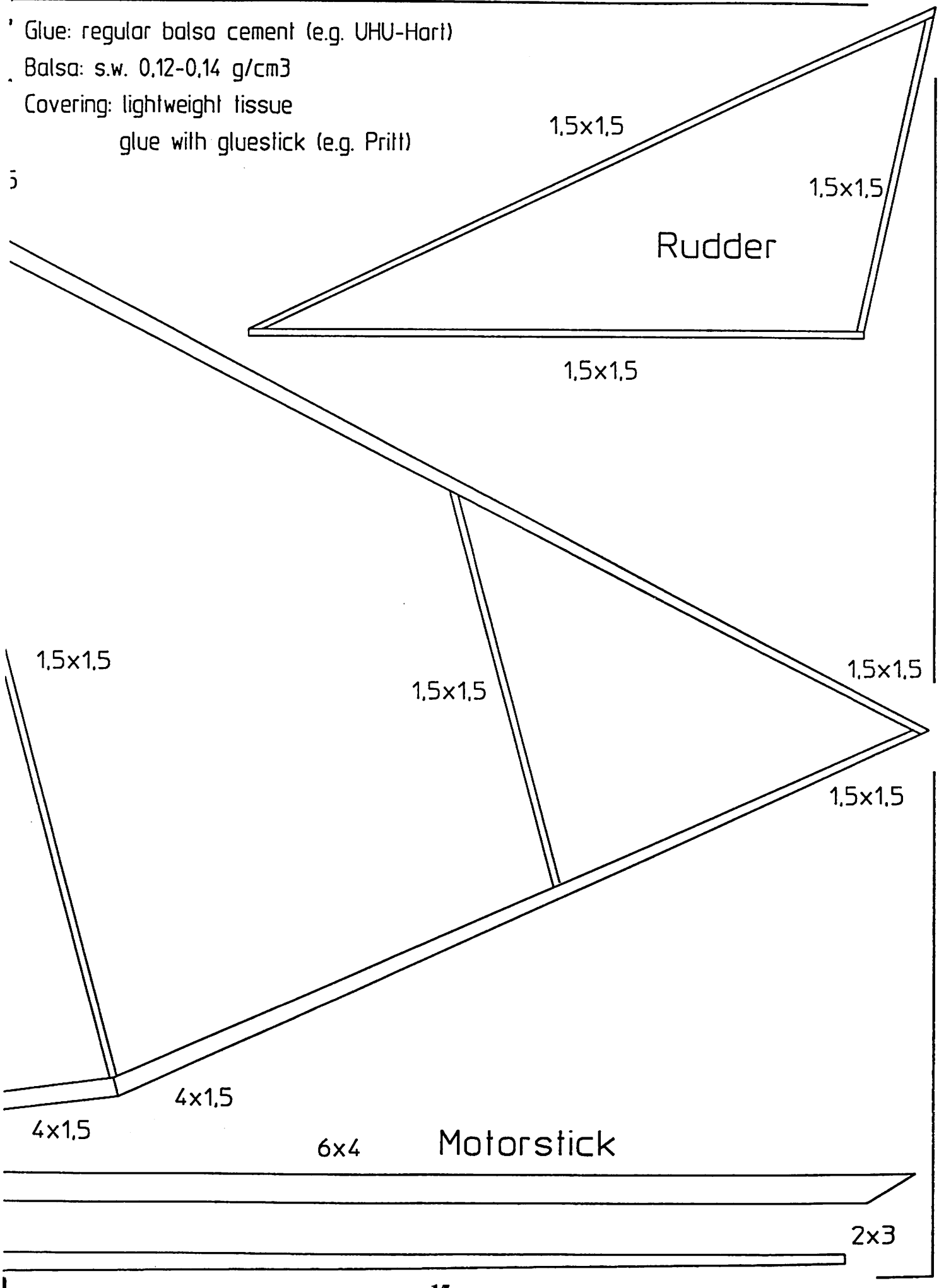

1,5x1,5
Stabilizer
4x1,5
4x1,5
1,5x1,5
1,5x1,5
Wing
Note: be sure to cover
the upper side
(the left wing is longer
than the right wing)!
1,5x1,5
1,5x1,5
1,5x1,5
Tailboom
5x3

Glue: regular balsa cement (e.g. UHU-Hart)

Balsa: s.w. 0,12-0,14 g/cm3

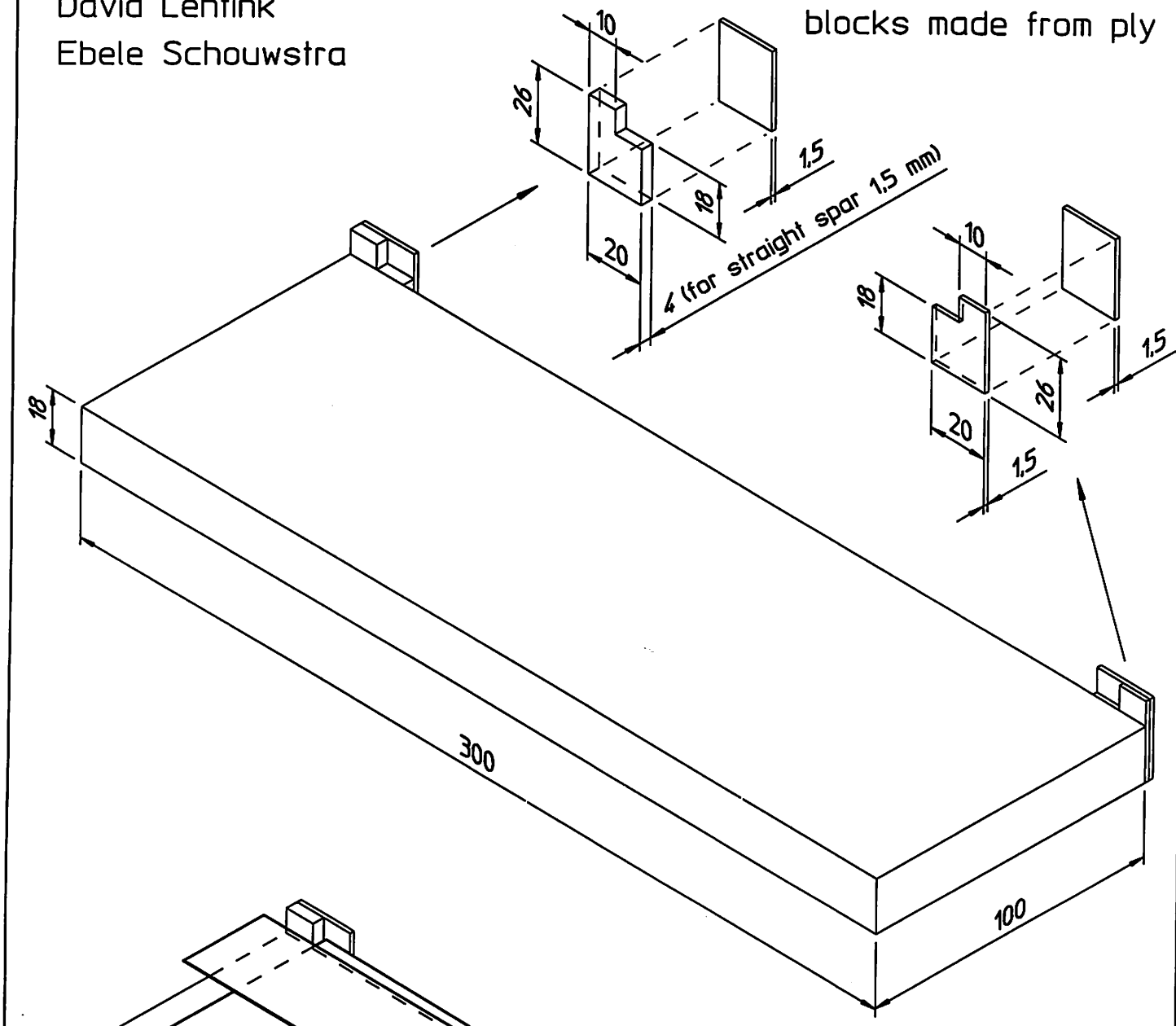
Covering: lightweight tissue

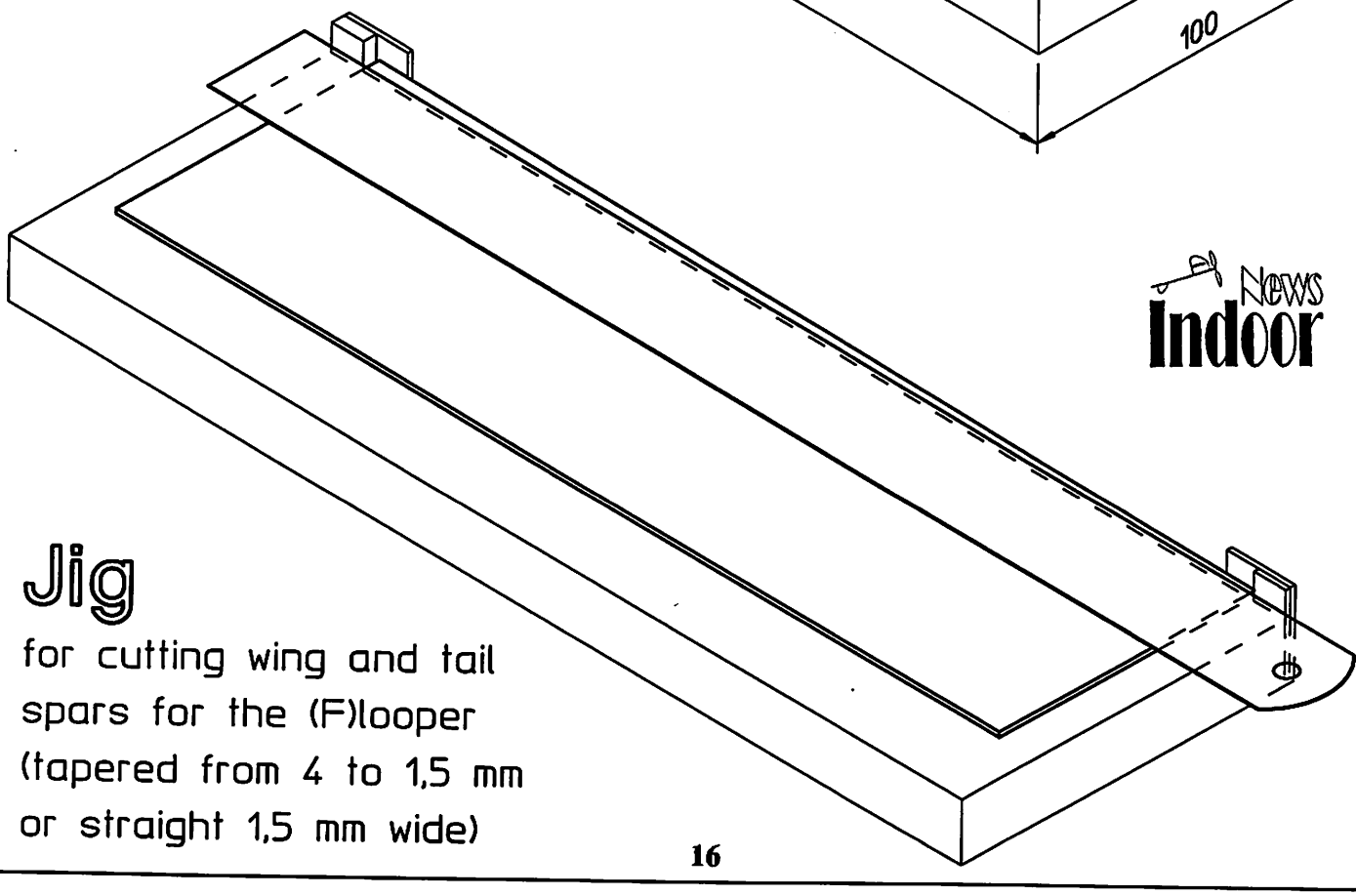
glue with gluestick (e.g. Pritt)



Design:
David Lentink
Ebele Schouwstra

blocks made from ply





Indoor News

Jig

for cutting wing and tail spars for the (F)looper (tapered from 4 to 1,5 mm or straight 1,5 mm wide)