CENTRAL INDIANA AEROMODELLERS

CIA INFORMER

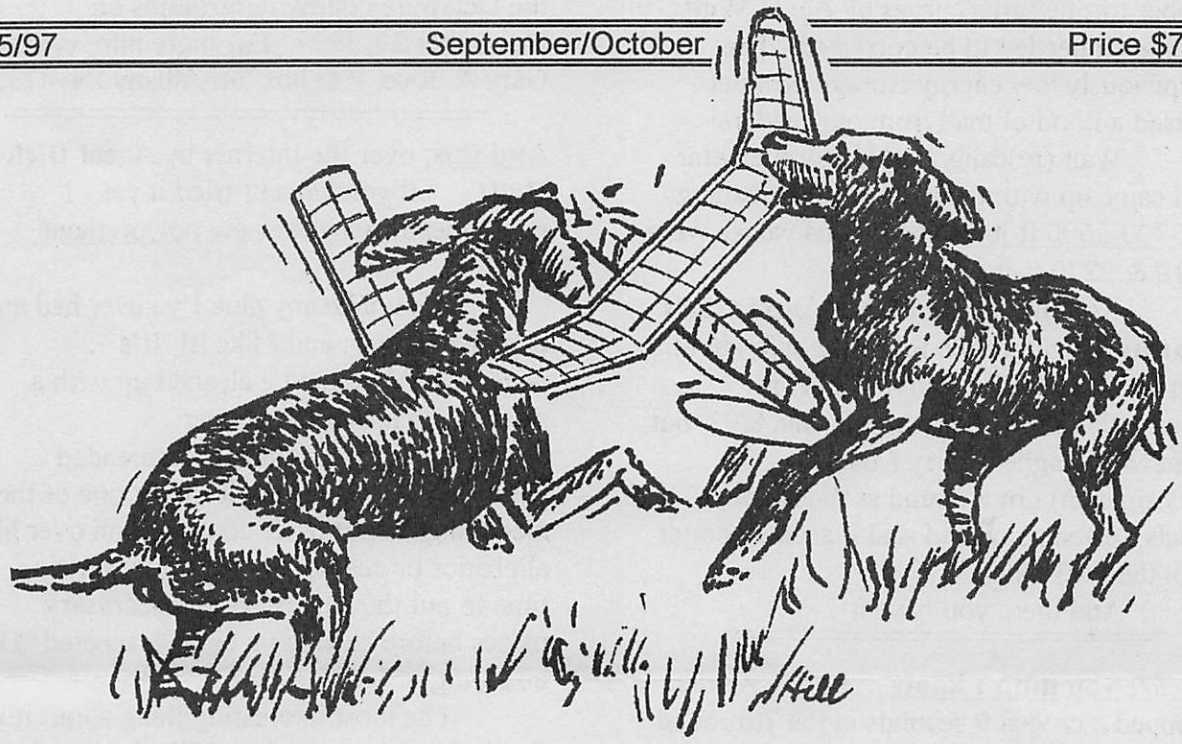
FREE FLIGHT NEWS OF THE MIDWEST

** The Weather **
Rain in October,
wind in December...

==========

- Editor -
Moe Whittemore
2348S, 700W
New Palestine
IN 46163
(317) 861-4266

Issue # 5/97 September/October Price $7.50/yr.



Ask and Ye Shall Receive!.... *Mo*

I'm overwhelmed! A couple issues back, I put out a request for info on an old rubber model, the "California Chickadee" I built when I was a kid.

Many thanks to all who responded with tips about where to find plans (John Pond's Service, of course!) - I purchased a set and have started cutting balsa! Agent **Bob Spink** even sent pictures of his 'Chick' and it's stablemate, the "Tiercel", both of which he recently completed. The Tiercel looks like a liteweight baby unlimited, a trend popular back then (ref: "Supa Dupa"....)

Apparently the California Model Company fielded three models: the ***Chickadee*** ("a basic trainer with thrilling performance") designed by Frank Greene; the ***Tiercel***; and a class B Indoor model, ***Featherette***. The Chickadee plans also show mods and instructions to make it competitive in indoor events! Unfortunately, since the stab was sheet stock, there is no top view of it to reveal it's outline on the plan - prop diameter isn't mentioned, either. Guess I'll just have to fake it....

Thanks again for all the help! I owe ya!!

Airfoils Don't Scale with Wing Area - *Gil Morris*

....not to get too technical about this, I went through the "10 Models of the Year" of past NFFS Symposiums, analyzing model airfoils. Goldberg's ***Sailplane*** never made that honor, but I included it anyway. I have to believe it was one of the best gliders of all time. Yet, if its airfoil was used on one of today's power models, it would be a disaster!

With no Phillips' entry, the drag at high velocity under power would be too great. The wing would probably twist, causing the model to tuck and go 'over-the-top'.

All of our models have an initial power burst, some more than others, which forces designers to make compromises. From the list (#3), Mekina's catapult glider has a nearly flat airfoil - sacrificing glide for altitude. Look, too, at (#24). Galbreath went for altitude instead of glide in ***Summer Wind***.

But look at (#4), Mark Drela's flapper IHLG, ***Upstart***. It has a superb undercambered airfoil which approaches a flat section at high

(cont'd, p.3)

New Agent!! Let's give a big gladhand to new CIA'er **Richard Little** from Gahanna, OH!

ERRATA!!! Seems that last issue's Tan II rubber torque/turns curves by Agent **Walt Tomasch** needed to be corrected. The suspiciously low energy storage product caused a flood of mail from our readers!

Walt (re)calibrated his torquemeter and came up with the more normal readings of 3300-3600 ft-lb/lb! (Previous values were 2110 & 2270 ft-lb//lb.)

As a matter of interest, Agent **Chris Matsuno** divulges the following info about Tan II: "The 7/97 batch of Tan II is apparently really good - better than 8/93, but somewhat fragile. Larry Coslick (indoorsman) got a pound at the Indoor Finals, tested some and said it seemed better than the 8/93 batch."

And there you have it!

In case you didn't know... Randy Archer dropped a crucial 9 seconds in the 7th round of the '97 WC when his F1C ship hits the top of a farmhouse roof! In honor of this, we present the following telephone conversation between him and Hardy Brodersen....

'Well, how did it go?'
'Not too good..'
'I heard about hitting the building.'
'Yeah. I needed some luck.'
'You had bad luck?'
'I needed some luck. My airplanes were going pretty good, so I didn't practice a lot.'
'Yeah?'
'Practice gives you luck....'

A reminder... if you have any FF things you've been holding back on because you don't think they're worthy enuf for publication, put aside that negativity and ***SUBMIT!*** (to the editor of the 1998 NFFS Symposium.) He's Dan Tracy, P.O. Box 244, Maple Valley, WA 98038. Don't be bashful!!!

SwapMeet! ..... The Munsee Skychiefs are putting on their first R/C Swap Meet. It's in the Delaware county fairgrounds on November 29, 1997. For more info, contact Gary A. Rice, P.O box 74, Albany IN 47320

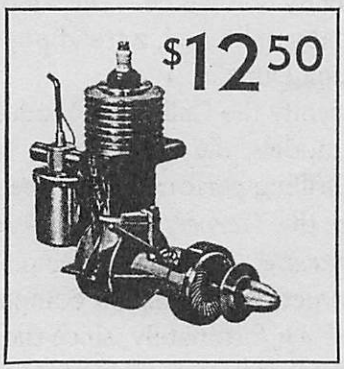
And this, over the Internet by Agent **Dick Hall** .... " If you haven't tried it yet - I recommend trying the new polyurethane glue!

It's unlike any glue I've ever had any experience with, and I like it! It's waterproof, but can be cleaned up with a solvent, such as dope thinner.

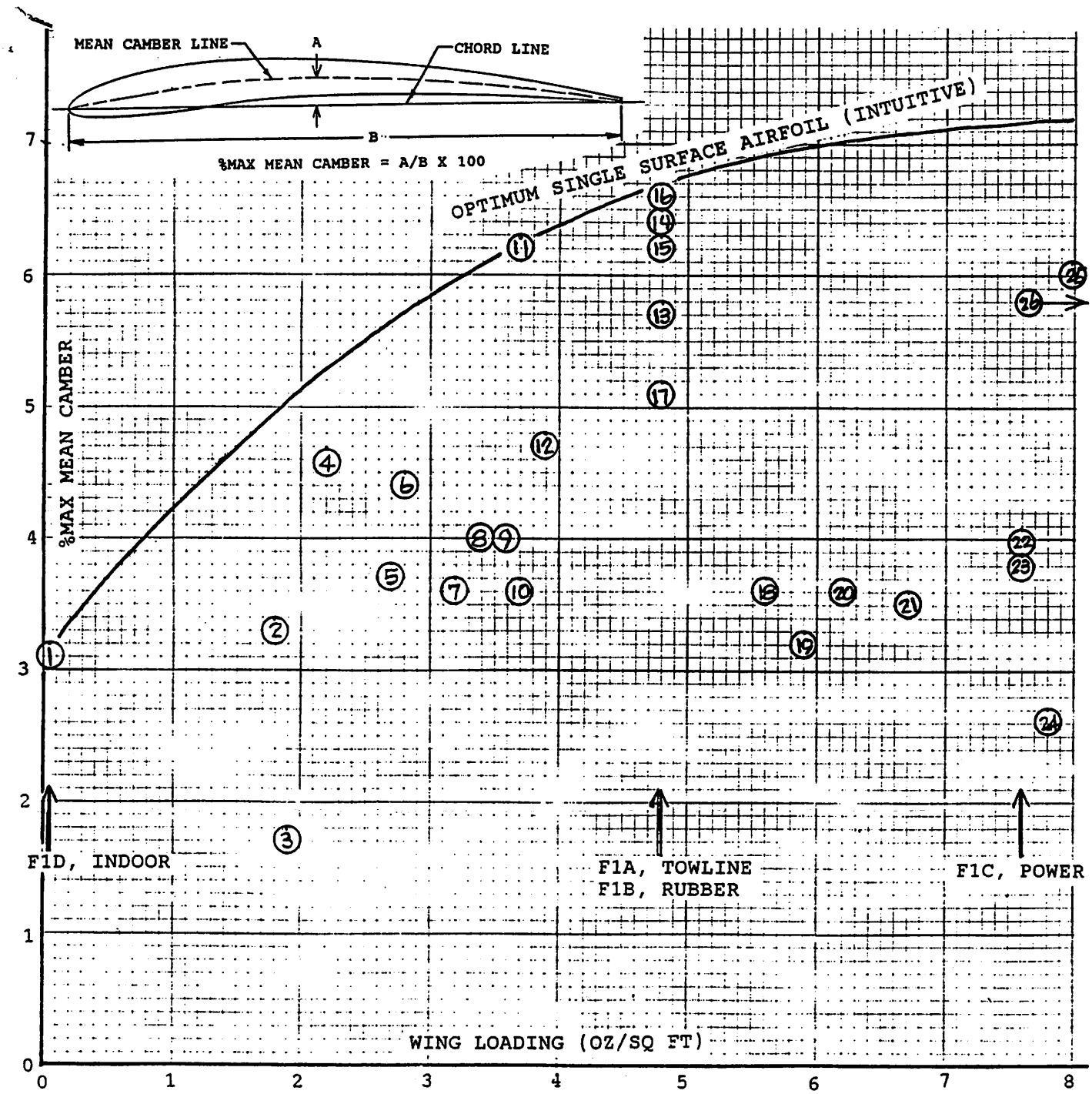
It's slow drying (recommended curing time 24 hours), but that is one of the nice things about it. It doesn't skim over like aliphatics or cellulose glues, thus allowing time to put the glue on all the necessary places before closing up as on a sheeted "D" box wing or box fuselage.

The most interesting thing about it is that it foams up as it dries, fills the gaps in poorly fitting joints, and fillets the joints. The dried foam is about the consistency of medium weight balsa, and is nicely sandable. It is more expensive than aliphatic, but it doesn't take a lot!

It's available from several manufacturers already (including Titebond). I got some from WalMart, and I've found it at Home Depot."



THE NEW "HUSKY" JV
MOST POWERFUL CLASS "A" MOTOR
.19 cu. in. displacement



(airfoils, cont'd from p. 1)

velocity in the launch as the flap lifts. Next, look at the F1B rubber models. Many of these have high camber and turbulators, favoring the glide. The most modern of these, Jerry Fitch's, has a lower cambered airfoil favoring a high velocity climb. Compare this to Joe Macay's ***No-Name Mulvihill*** which probably has a long prop run and lumbering climb, but great glide.

The placement of the max mean camber value on the graph (page 3) tells much about the model's characteristics. I have shown a hypothetical curve representing max mean camber for what I believe will produce optimum glide (minimum sink rate), the ultimate glider with no consideration for power. These are single surface airfoils where the mean camber is coincident with the top and bottom cambers.

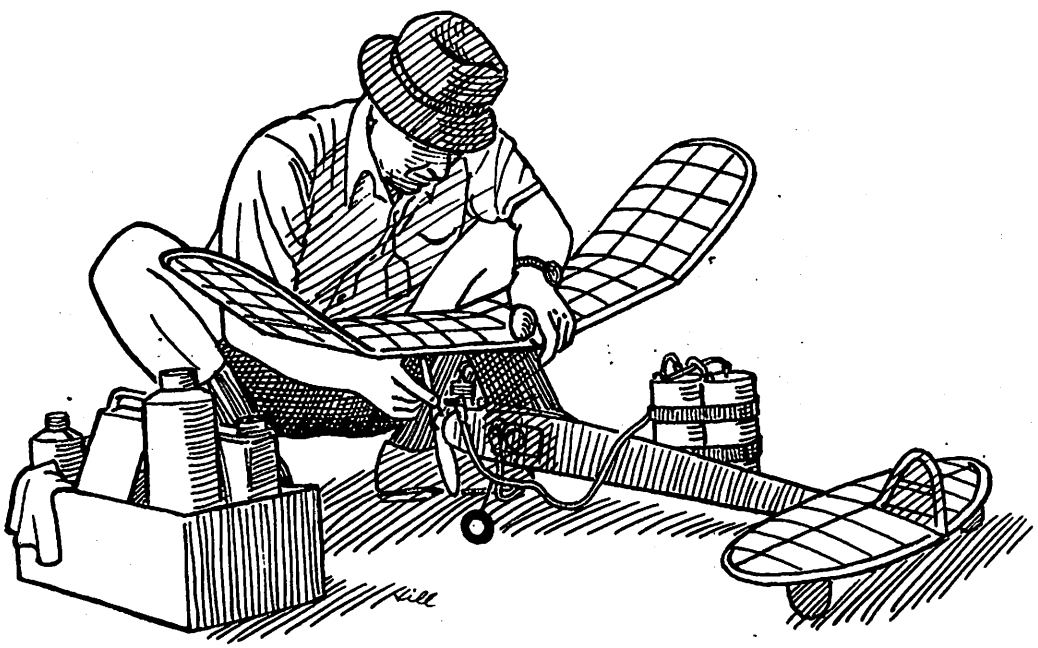
Now suppose Perryman used the ***Sailplane*** airfoil on ***Small Giant Speckled Bird*** (#2), an airfoil with 6.0% max mean camber in place of one with 3.3%. The glide would be absolutely lousy! Or, suppose you scaled down the ***Sailplane*** to .020 engine size - say, to 150 sq.in. from 850 sq.in.

Instead of 8 oz/sq.ft., the wing loading would be about 3.5 oz/sq.ft. Now, the supreme Goldberg airfoil would be the pits!

The point is, when you scale down, you have to <u>flatten</u> the airfoil to maintain that great glide! (In this case, from 6.0% max mean camber, to about 4.0%.) Airfoils don't scale with wing area! - Gil

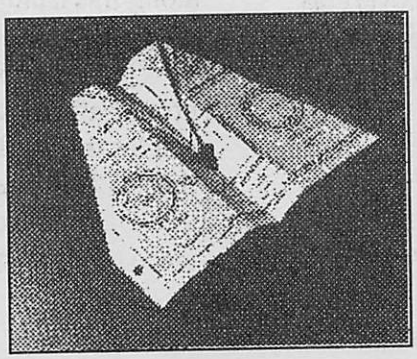
Gils' List ('Airfoils Don't Scale' article - see chart on p3)

Model Name / Designer	Wing Loading oz/sq ft	Max Mean Camber
1. Starwalker F1D, J. Richmond	0.05	3.1%
2. Sm. Giant Speck.Bird, Perryman	1.8	3.3%
3. Straight Up, Mekina	1.9	1.7%
4. Upstart, Drela	2.2	4.6%
5. Gold Rush, Cowley	2.7	3.7%
6. Super Twin Fin, White	2.8	4.4%
7. 1/2A Matchsticks, Morris	3.2	3.6%
8. Lunar Tic, Murphy	3.4	4.0%
9. T Bird, Hanson	3.5	4.0%
10. Nibble, Poti	3.7	3.6%
11. No Name Mulvihill, Macay	3.7	6.2%
12. ShuriKing, Pailet	3.9	4.7%
13. Pacer 35 F1A, Gewain	4.8	5.7%
14. Flux F1B, Ghio	4.8	6.4%
15. Viceroy F1B, Matsuno	4.8	6.2%
16. Espada F1B, Doring	4.8	6.6%
17. JWF 8 F1B, Fitch	4.8	5.1%
18. ABC Toothpicks, Morris	5.6	3.6%
19. Satellite C, Hunter/Archer	5.9	3.2%
20. Niblite, Poti	6.2	3.6%
21. Hummin' Bird, Caton	6.7	3.5%
22. No. 2 F1C, Rocca	7.6	3.9%
23. No. 15 F1C, Archer	7.6	3.8%
24. Summer Wind F1C, Galbreath	7.8	2.6%
25. Sailplane, Goldberg	8.0	6.0%
26. Atlas Cargo, Ramirez	50.2	5.8%



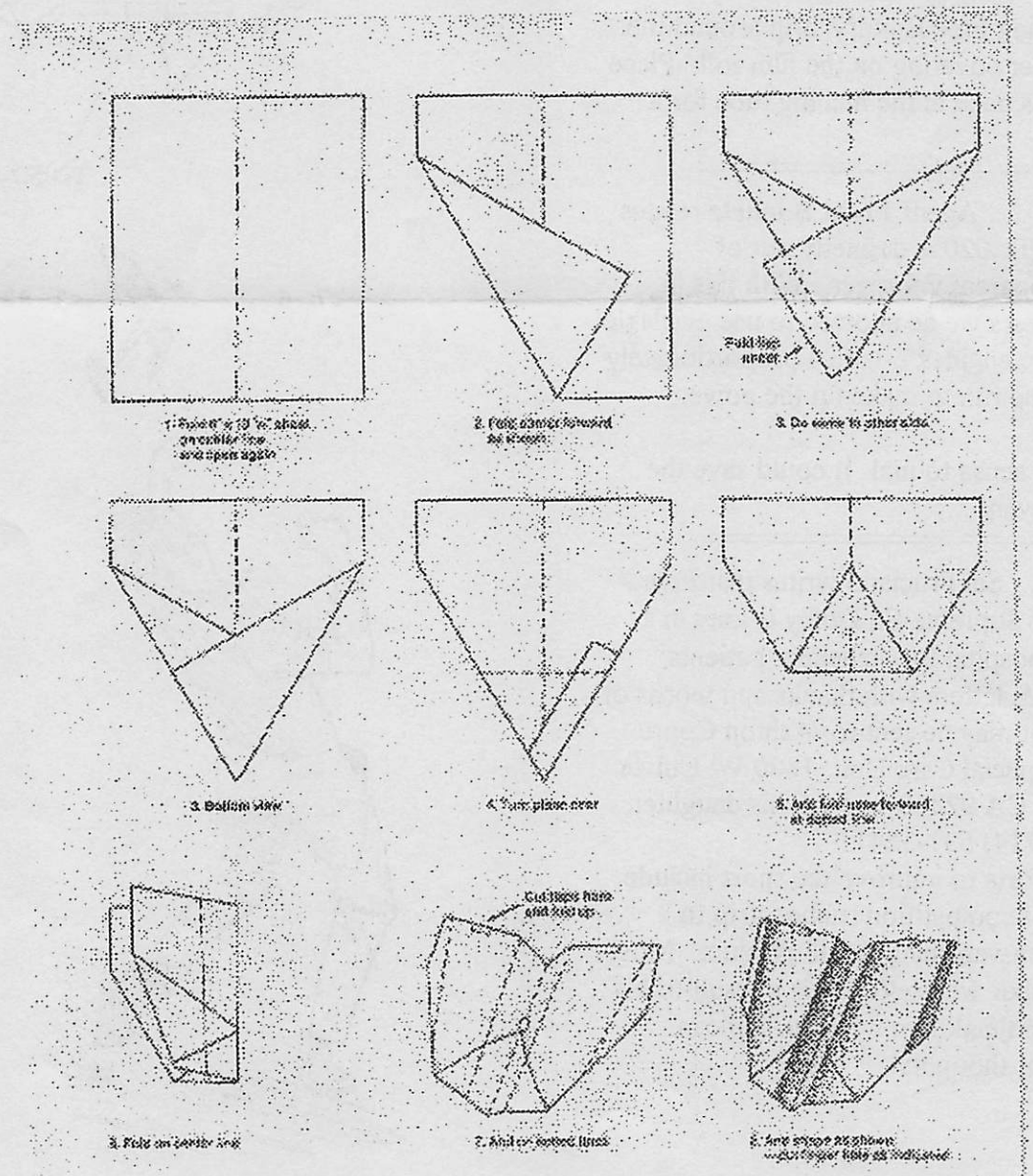
A preview .... the '98 CIA Banquet will be held 1/24/98 at Welliver's in Hagerstown, IN. Adults, $16.50, 10-11, $8; 7-9, $6; 2-6, $3. More details in the next issue.....

MARCH 1996 Paper Airplane



Start with a sheet of 8 x 10 1/4".

Fold as shown.



Build one and throw it around - at the CIA Banquet!

Your Tail Too Heavy? Since many modelers are already switching to lite plastic film coverings to keep stab weight down, how about the possibilities offered by the following indoor stuff?

1. Ultra Film (Harlan)	0.0045oz/100 in^2
2. Ultimate (Trivin)	0.0036oz/100 in^2
3. PM2L (Obarski)	0.0027oz/100 in^2
4. Microfilm (ref)	0.0015oz/100 in^2

PM2L can be obtained from R.W. Obarski, 2112 N. Halcyon Dr., Sun City Center, FL 33573. $15.00 (ppd) for a 15 ft roll.

Dick also suggests that you can remove the static from many thin plastic films by wrapping a Kling Free laundry strip around the protective paper covering on the film roll. Place the whole mess back in the mailing tube for a week!

A Suggestion ..... Agent **Elvin Buchele** relates that the Cox TD .020 is definetly out of production, apparently forever. With this in mind, he suggests we be allowed to use available .020 reed valve engines - with a proportionately extended engine run to make up the power difference.

Makes sense to me! It could save the .020 Replica event....

A sad note ..... Sal Fruciano writes that Free Flight Booster Supreme Ed Dolby is now in a convalescent hospital for alzheimer patients!

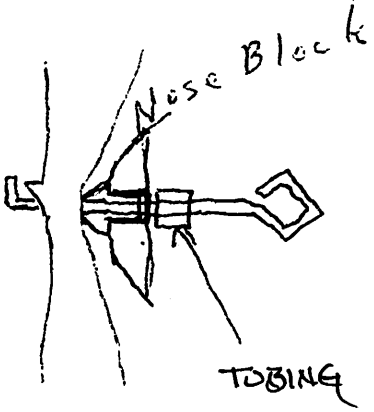
Cards & letters with thanks and words of encouragement may be sent to: Ashton Court Alzheimer's Special Care Unit, 1800 W. Culver Ave., Orange, CA 92868 - or call his daughter, Jan Klein @ (714) 531-3541.

His efforts to improve the sport include the sourcing of competition rubber strip to replace the then-vanishing Pirelli product. Most of the FAI rubber we use today is a result of his efforts! Please thank him while he still can appreciate your thoughts! - *Moe*

Freewheel! ..... Agent **Ken Johnston** sends along this handy hint for enhancing the freewheel properties of the usual P-30 stock setup.

Fuel tubing (a tight fit) is pushed on to the prop shaft. Locate it at the point where it will just let the shaft disengage. Freewheels every time. Light & easy!!

Fuel line too loose? Pull insulation from a piece of wire and use it, instead.







Contest Results for
NOFFA Summer Contest
August 16 - 17, 1997

PeeWee 30

Bill Hale	2400
Elmer Jordan	1537
Bill Barr	1127

ABC O.T. Pylon

Bob Edelstein	240
Bob Placier	225

O.T. Rubber - Stick

Roger Lane	240
Frank Heeb	120

ABC Nostalgia

Bill Hale	360
Bob Edelstein	260
Carl Rowland	242
Elmer Jordan	241
Bob Placier	222
Bill Reuter	135

P-30/Coupe

Marty Richardson	324
Frank Heeb	277
Walt Tomasch	166
Larry Willis	4

Hand Launch Glider

Joe Mekina	280
Larry Willis	187
Bill Barr	145
Tom Jones	134
Lee Campbell	130
Bill Reuter	120

A-B Gas

Bob Placier	284
Charles Mortimer	259
Bill Barr	218
Bill Reuter	213

JR. Rubber

Jon Reuter	130
Jason Poti	126
Ryan Jones	41

JR/SR AMA Power

Jason Poti	243

FAI Combined

Joe Wagner	840
Jim Keppler	710
Bill Kozak	120

.020 O.T./ Nostalgia

Charles Mortimer	310
Bob Edelstein	283
Dan Harshman	248
Lee Campbell	196
Bill Brewer	44

O.T. Rubber - Cabin

Larry Willis	360
Tony Carrara	76

Hand-Held Catapult Glider

Bill Reuter	201
Tom Jones	189
Lee Campbell	181
Joe Mekina	167
Larry Willis	158
Roger Lane	44

1/2 A Gas

Jim Haught	320
Bill Reuter	143

1/2A Nostalgia Gas

Dan Harshman	315
Bill Hale	278
Bob Placier	241
Elmer Jordan	220
Bob Edelstein	191
Larry Willis	120

ABC O.T. Fuselage

Dick Patton	306
Dan Harshman	257
Bob Edelstein	185
Bill Hale	57

Hand Launch Glider - JR

Jon Reuter	78
Kyle Shannon	56
Jason Poti	55
Brandon Shannon	54
Kyle Rowland	51

Hand-Held Catapult JR

Jon Reuter	151
Ryan Jones	129

High Point Winner = Bob Edelstein
Team Catapult Challenge Winner - Norm Pot, Lee Campbell, Joe Mekina
Weather Saturday = Windy! Sunday = Windy again!

CHICAGO AERONUTS 35th FALL OLD TIMERS CONTEST
August 23, 1997

A Fuse/Pylon Gas

1. Bob Edelstein	554
2. Warren Weisenbach	339
3. Paul Skelley	90

Sm Cabin/Stick Rubber

1. Larry Willis	780
2. Ed Konefes	528
3. James Ferwerda	486

ABC NosGas

1. Gene Bowers	840
2. Dick Bloomquist	766
3. Bob Edelstein	522

.020 Replica

1. Roger Lane	249
2. Dan Harshman	232
3. Bob Kumferman	230

Twin Pusher (mass launch)

1. Bob Moulton	
2. Ken Tillou	
3. Ed Konefes	

B Fuse/Pylon Gas

1. Harry Murphy	334
2. Warren Weisenbach	321
3. Dan Harshman	239

O.T HLG

1. Ralph Schlarb	237
2. Bill Schlarb	229
3. Bob Johnson	53

1/4A NosGas

1. Gene Wicks	469
2. Bob Watson	428
3. Bob Placier	421

C Fuse/Pylon Gas

1. Elmer Jordan	350
2. Don Diggs	336
3. Warren Weisenbach	315

Lg Cabin/Stick Rubber

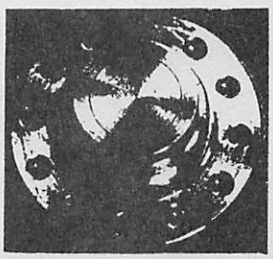
1. Larry Willis	1020
2. Ed Konefes	703
3. Robert Walter	540

Early 1/2A NosGas

1. Bill Hale	297
2. Shel Myers	266
3. Bob Edelstein	221

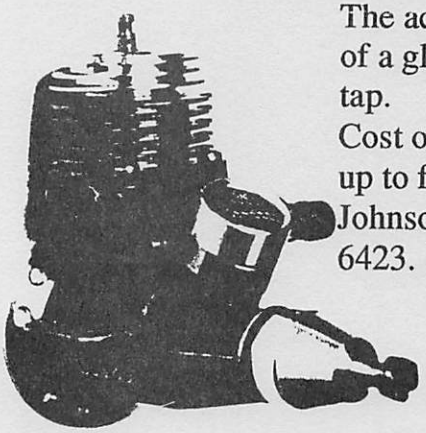
TEXAS TIMERS

Texas Timers announces immediate availability of the first and only Radial Engine Mount designed expressly for the popular Norvel/AME .049/.061 size engines, including the new Mark III model, and the Russian made STELS engines of the same displacement. Applications include Free Flight, Radio Control, and Control Line.



The new RADIAL ENGINE MOUNT replaces the back crankcase cover and simply threads into the engine. No separate or additional engine mount is needed. Advantages are lower flying weight, ease of thrust line adjustment, fast exchange of engines, and easy installation. The mount flange has 12 pre-drilled holes for flexibility in firewall mounting. In addition, the holes are compatible with similar pre-drilled mounts for the Cox TD .049/.051 engines, and the holes will match up with many of the common glass filled beam mounts for these engines.

The actual weight of the mount is only 1.8 grams. Installed weight savings over the use of a glass filled beam mount is about 3 grams. The mount may be drilled for a pressure tap.



Cost of the Radial Engine Mount is $6.50 each. Postage and handling to US locations for up to five mounts is $1.50. Available from Texas Timers, 3317 Pine Timbers Drive, Johnson City, TN 37604. Send a SASE for more information. Call or Fax to (423) 282-6423. Email to <txtimer@tricon.net>.

CENTRAL INDIANA AEROMODELLERS
FREE FLIGHT CONTEST

RESULTS OF 25TH ANNUAL REGIONAL
Sept. 13 and 14 Muncie, Indiana

Saturday, 80 degrees, winds light

CLASSIC POWER (8)

1	Jack Marsh	450
2	Harry Murphy	438
3	Gene Wicks	432
4	Dick Bloomquist	425
5	Gene Bowers	360

AB AMA GAS (5)

1	Gib Robbins	900
2	Bob Johannes	709
3	Dick Covalt	671
4	Tom Durbin	568
5	Brad Bane	340

PEE WEE 30 (6)

1	Gene Bowers	2353
2	Bill Hale	2350
3	Elmer Jordan	1978
4	Bill Barr	1845
5	Shel Myers	1679

MULVIHILL RUBBER (9)

1	Joe Williams	1692
2	Larry Willis	1673
3	OC Stewart	1008
4	Don DeCook	962
5	Roy Stewart	950

MOFFETT/KORDA (4)

1	Bud Brown	916
2	Larry Willis	780
3	Joe Williams	540
4	Ed Konefes	519

HH CATAPULT (15)

1	Ralph Schlarb	446
2	Norm Poti	352
3	Guy Scott	344
4	Bill Schlarb	337
5	Joe Mekina	294

½ A NOS GAS (21)

1	Steve Sova	720
2	Bill Hale	706
3	Jack Marsh	455
4	Tom Hepler	348
5	Shel Myers	344

.020 PAYLOAD (5)

1	Ted Dock	360
2	Elmer Jordan	338
3	Roger lane	233

ABC NOS GAS (10)

1	Kkeith Fulmer	720
2	Les Hallgarth	588
3	Bob Watson	478
4	Bill Schlarb	451
5	Dick Bloomquist	360

JUNIOR CATAPULT (6)

1	Chris Mekina	199
2	Jason Poti	157
3	Jon Reuter	137
4	Adam Marsh	132
5	Alex Marsh	58
6	Markie Wood	14

HOOSIER CUP

F1A (1)

1	Chuck Markos	926

F1B (5)

1	Chris Matsuno	1260
2	Marty Richardson	1210
3	Chris Parkyn	1180
4	John Watters	1083
5	Bill Kozak	1027

F1C (5)

1	Gil Morris	1260
2	Joe Wagner	995
3	Joe Mekina	485
4	Norm Poti	360
5	Hardy Broderson	129

Sunday, 80 degrees, winds light

½ A AMA GAS (11)

1	Keith Fulmer	982
2	Bob Johannes	740
3	Bob Watson	721
4	Joe Wagner	585
5	Tom Jones	464

CD AMA GAS (10)

1	Joe Mekina	1500
2	Bob Johannes	1318
3	Dick Covalt	1049
4	Guy Scott	727
5	Dick Bloomquist	722

¼ A NOS GAS/020 REPLICA (15)

1	Brad Bane	360
2	Larry Willis	346
3	Harry Murphy	334
4	Bill Hale	326
5	Charles Mortimer	325

HL GLIDER (12)

1	Jim Buxton	275
2	Tom Jones	234
3	Bill Schlarb	217
4	Ryan Bane	158
5	Bill Barr	148

P-30 RUBBER (14)

1	Craig Gunder	690
2	Ed Knoefes	620
3	Eric Hepler	506
4	Tom Jones	339
5	Don DeCook	331

JR HL GLIDER (6)

1	Adam Marsh	75
2	Jon Reuter	73
3	Alex Marsh	46
4	Chris Mekina	30
5	Jason Poti	28
6	Markie Wood	9

ABC OT GAS (10)

1	Gene Bowers	695
2	Bob Larsh	659
3	Harry Murphy	536
4	Ed Knoefes	459
5	Bill Hale	457

JR RUBBER (3)

1	Jon Reuter	149
2	Jason Poti	131
3	Markie Wood	41

HOOSIER CUP

F1G (11)

1	Joe Williams	780
2	Chuck Markos	745
3	Tom Hepler	583
4	Doc Zabelka	582
5	Chris Parkyn	580

F1J (6)

1	Keith Fulmer	780
2	Bob Perkins	753
3	Austin Gunder	711
4	Jim Haught	589
5	Jean Pailet	545

F1H (4)

1	Jim Buxton	462
2	Jean Pailet	409
3	Jon Reuter	310
4	Chuck Markos	120

SILVER ANNIVERSERY RECAP

* **68 total entries**
* **202 event entires**
* **860 official flights**





CIA FALL SCRAMBLE ENJOYS EXTRAVAGANT WEATHER

The first ever CIA Fall Scramble opened on Saturday enjoying near dead calm conditions and seasonable temperatures for October 18 in central Indiana. Big E rubber was flown to the 9 minute flyoff flight with both **Joe Williams** and **Larry Willis** dropping with less than a max. Joe edged out Larry by 147 seconds with a 7 minute 59 second flight. Larry and Joe flew simultaneously on each flight and did not drift off the AMA Muncie flying site! An outstanding performance by both.

Other record chasing performances on Saturday included **Gib Robbins** dropping his 6 minute flyoff in F1J by 104 seconds, **Norm Poti** dropping the 9th flight in 1/2A by 11 seconds, **Dick Covalt** dropping the 12th in A Gas by 10 seconds, and **Jim Thornberry** dropping his 5 minute F1A flyoff by 34 seconds. There were 15 events flown Saturday with a total of 38 event entries yielding 119 posted maxes. Had a cloud not hovered over the field for the last 3 hours of the contest many records would undoubtedly have been broken.

We appreciated the support of **Dave Brown**, AMA president, and **Charlie Bauer**, District VI VP. Dave and Charlie attended an Executive Council meeting earlier Saturday at AMA HQ and stopped by the field to converse and observe free flight activities. Charlie entered as contestant number 30 and although it wasn't know at the time, assured a break even on contest expenses. Many thanks to both for taking time from their busy schedule for a little FF conversation.

Sunday events began with the Dawn Unlimited launch window scheduled from 7:30 to 7:45 AM. The temperature was cool at about 37 degrees with a modest haze, but the wind was dead calm. All 4 contestants put up their flights in the first 5 minutes of the window with all being in the air simultaneously. **Joe Williams** edged out the competition with an 8 minute 6 second flight in absolutely dead air.

The wind stayed calm with an unpredictable drift until about 10 o'clock when a 5 mph wind from the SSW begin. From about 11:00 to 12:30 the wind would alternately switch from south-southwest to North in 20 minute intervals.
Talk about Contest Director confusing conditions! The wind finally settled down to be from the West-Southwest about 1:00 PM at 7-10 mph. The temperature had climbed to a very enjoyable 65 degrees by this time, but the flying location, wind speed, and wind direction limited the clear flying area to about 5/8 mile at this point making a 2 1/2 minute max somewhat risky. As a result we didn't see the runs of maxes that was prevalent on Saturday.

Bob Perkins made a gallant try in Mulvihill Sunday putting his 4 minute max flight off the field West (at the south end of the flying site) in rough conditions which required a few hours to recover with a Walston. Needless to say, he didn't further challenge **Ed Konefes'** Saturday performance of 8 maxes plus 5 minutes 53 seconds.

The Fall Scramble drew a total of 33 contestants entered with 83 event entries in 21 different events out of 28 available. Even helicopter turned 3 entries with **Nick Walton's & Jim Thornberry's** Saturday night specials getting beat out by **Roger Lane's** more thoroughly tested ship that turned in 200 seconds for a three flight total.

Great fun was had by all and plans have already started for a bigger and better contest in 1998. It is anticipated a fourth category of events will be added. This category will be NON-AMA and include the popular events such as Pee Wee 30, Old Timer Gas and HLG, more Nostalgia and CIA Classic Power, etc.

Thanks to **Mark and Dan Vest of Muncie Model Supply** for helping to put together a merchandise prize selection and having a large selection of CA available for event winner awards. And last of all thanks to all the contestants and timers for their help and support, as well as **Steve Frazier** for his able assistance with the score boards making it easy and a pleasure to CD this contest.

Dick Covalt, CD

The **INFORMER**

CENTRAL INDIANA AERO MODELLERS

CIA

2348S, 700W
New Palestine,
IN
46163

1997 President
Dick Covalt

Vice President
Mark Wood

Sec'y/Treasurer
Les Hallgarth

Issue No. 5 - 97

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