

### **NEWS and VIEWS** Editor: Bud Tenny · Box 545 · Richardson, Texas · 75080

\*\*\*\*NATIONAL INDOOR MODEL AIRPLANE SOCIETY\*\*\*\*

### A Reminder

Turn right now to the outside page of this issue and note the mailing label. In the upper right-hand corner of the label there appears (with very few exceptions) a number. Note up above, in the masthead-the number 1 appears. All this number jazz is the result of a suggestion by Ed Whitten which allows my normal bookkeeping actions to proceed properly, even if I continue to have difficulty is resuming my original once-a-month publishing schedule. This issue is #1 in the new series of issues which begin with this issue, and the number of your address label is the number of the issue which marks the end of your subscription. If for some reason you feel that you have more issues coming, check with me and I will send you a copy of the record card and we will work out what happened. Meanwhile, you can rejoice that the publication date which appears above is essentially, if not completely, up to date. It may have taken teaching an old dog new tricks, but we made it! Turn right now to the outside page of this issue

As this is being written, I'm not sure that more than the results will fit. If they did, I also have some commentary about the two other major events which we (NIMAS) shared our week with; the Nats and the Peanut Scale Grand Prix. If you have just joined us, results from the Grand Prix and results and commentary from the Peanut Scale Speed event (part of SNART) appeared in the next most previous issue (should it be called -1?); that issue was dated Dec. "79.

## FAI Finals

About the time you get this, the FAI Finals to pick the U.S. Indoor Team for the 1982 Indoor World Championships) will be ready to begin at Santa Ana hangar in California. I hope that some kind soul will furnish some information and at least a short report on what happened and who won, with what.

### THE PICTURE STORY

Photos from all three events have been interminging, all photos by Bud Tenny.

Row 1 Left - Martin Varney's semi-scale Bostonion. Wing had been shifted back for better balance; not enough (see clay on skid). Model heavy, but flew well.

Row 1 Right - Mike Clem winds his "new rule" Easy B; second place in the Nats.

Row 2 Left - Experimental Easy B prop, flown by Brian or Bradley Fulmer. Hub structure is round carbon fiber strand; material was available as sample only. The short piece only holds the pitch angle. Same size material is stiff enough for wing posts.

Row 2 Right - No, not turbulator strips -- de-turbulators! This model by Moe Whittemore was too light for the ceiling. The modification greatly increased the altitude, but too little to make the model competitive.

Row 3 Left - Folkerts Racer by Martin Varney won the Peanut Speed event handily, yet flew well in duration also. This one didn't climb 'way past the top of the pylons!

Row 3 Right - Doc Martin loads his Alco Sport; it won 4th at

Row 4 Left - Don Lindley holds while Dave winds; they are an active father-son team from the Chicago Aeronuts.

Row 4 Right - Dennis Jaecks built two almost identical Pennyplane models; a careful study will show the left one has constant camber airfoil, while one on right tapers in thickness from 7% to 3%; reduces level flight torque and improves flight time.

Row 1 Left - This neat model came from Ranier Lotz of West Germany. This one was properly packed and came with good flight instructions.

Row 1 Right - An all-balsa, built-up, covered tasy b prop.
The covering is ultra-thin balsa, with grain running across the blade. It was worth the trouble--Earl Hoffman won the Nats with it!

Row 2 Left - Two-piece slotted stab for Pennyplane; built by Moe Whittemore. Wing has a reflex airfoil, with single-surface covering on the bottom of the ribs. Model seemed to fly well, Moe needed more time to trim for high ceiling.

Row 2 Right - Another unusual prop--Pennyplane prop made from styrofoam covering from 2-liter soft drink bottle. Bernie Boehm got the idea and tried shortly after the container style was discontinued! Oh, well, maybe next time!

Row 3 Left - Bill Hulbert with his FAI models.

Row 3 Right - Jim Clem's Novice Pennyplane and built-up prop. Prop outline and pitch layout per Cezar Banks' Novice PP.

Row 4 Left - This super-light Peanut wasn't packed well, got here mangled. Martin Varney did super repair job; proxyflew the model to second place.

Row 4 Right - Walt Van Gorder with one of very few 20+ papercovered Easy B models. Walt is a fierce competitor; has done well in short time flying indoor.

# 1981 INDOOR NATS RESULTS

AMA STICK - Jr.		AMA LADIN - Jr.	
Jenifer Jaecks	8:23.6	Paul Loucka	11:24.3
<u>Chad Curth</u>	5:39.0	Bryan Fulmer	4:33.2
Paul Loucka	0:48.2		
		AMA CABIN - Op.	
AMA STICK - Sr.		Richard Doig	18:57.0
Dave Lindley	17:48.6	Tony Sutter	14:40.8
Mike Clem	17:18.2	Larry Loucka	13:05.0
Bradley Fulmer	8:33.8	Dan Belieff	9:22.6
		Ron Ganser	4:27.2
AMA STICK - Op.		Non danser	
Cezar Banks	30:31.8	FAI STICK - Jr.	
Jim Richmond	30:29.4	Jenifer Jaecks	21:53
Bill Hulbert	30:13.2	Paul Loucka	18:21
Paul Tryon	27:19.6		15:08
Richard Doig	25:41.0	Chad Curth	13.00
Donnie Joseka	25:34.8	FAI STICK - Sr.	
Dennis Jaecks	25:31.6	Dave Lindley	34:37
Dan Belieff	23:03.4	Dave Lindley	34.57
Dick Hardcastle		FAT STICK O-	
Ed Stoll	22:56.0	FAI STICK - Op.	60.25
Ron Ganser	21:44.0	Jim Richmond	68:35
Earl Hoffman	21:25.4	Earl Hoffman	65:40
Jeff Annis	20:13.0	Stan Chilton	65:14
James Davidson	19:51.0	Paul Tryon	63:17
Jerry Skrjanc Roman Szymula	19:32.0	Bill Hulbert	62:53
Roman Szymula	19:18.6	<u>Dick Obarski</u>	59:11
Dick Obarski	16:26.0	Ed Stoll	58:37
Otto Curth	13:02.8	Richard Doig	57:04
Jim Clem	11:51.4	Dick Hardcastle	55:50
		Roman Szymula	45:06
AMA PAPER STICK -	JR.	Jack Carter	42:25
Jenifer Jaecks	9:40.0	Walt Van Gorder	42:02
Bryan Fulmer	8:27.0	Jeff Annis	40:43
Paul Loucka	8:26.0	Ron Ganser	39:52
Chad Curth	6:49.0	Dan Belieff	38:01
		Jim Clem	28:49
AMA PAPER STICK - Mike Van Gorder	\r	Otto Curth	15:21
Mike Van Condon	15.30 4	Dennis Jaecks	15:15
Dave Lindley	13:26.0		11:32
Dave Lindley	8:01.6	Larry Loucka	11.52
Bradley Fulmer		AMA DENNYDLANE 1	_
AMA PAPER STICK - Jim Richmond	On	AMA PENNYPLANE - J	11:25.4
AMA PAPER STICK -	27.25 4	Jenifer Jaecks	0.57 2
Jim Kichmond	24:38.0	Paul Loucka	9:57.2 8:54.2
Jerry Skrjanc	23:50.4	Thomas Norell	7:42.7
Richard Doig	23:14.0	Chad Curth	6:48.4
Dick Obarski		Brian Varney	6:43.4
Ed Stoll	22:42.0	Kris Warmann	3:18.0
Ron Ganser	21:54.4	Bryan Fulmer	3:10.0
Dan Belieff	21:53.0		
Charlie Sotich	20:18.0	AMA PENNYPLANE - S	<u>r.</u>
Gordon Wisniewski	19:29.0	Mike Clem	10:38.3
Tony Sutter Stan Chilton	19:28.4	Dave Lindley	10:28.0
Stan_Chilton	19:08.2	Mike Van Gorger	9:14.0
Rex Powell	15:51.2	Glenn Campbell	6:12.0
Tom Killough	15:06.0	Bradley Fulmer	5:33.0
Douglas Barber	13:04.4	*	

13:04.4

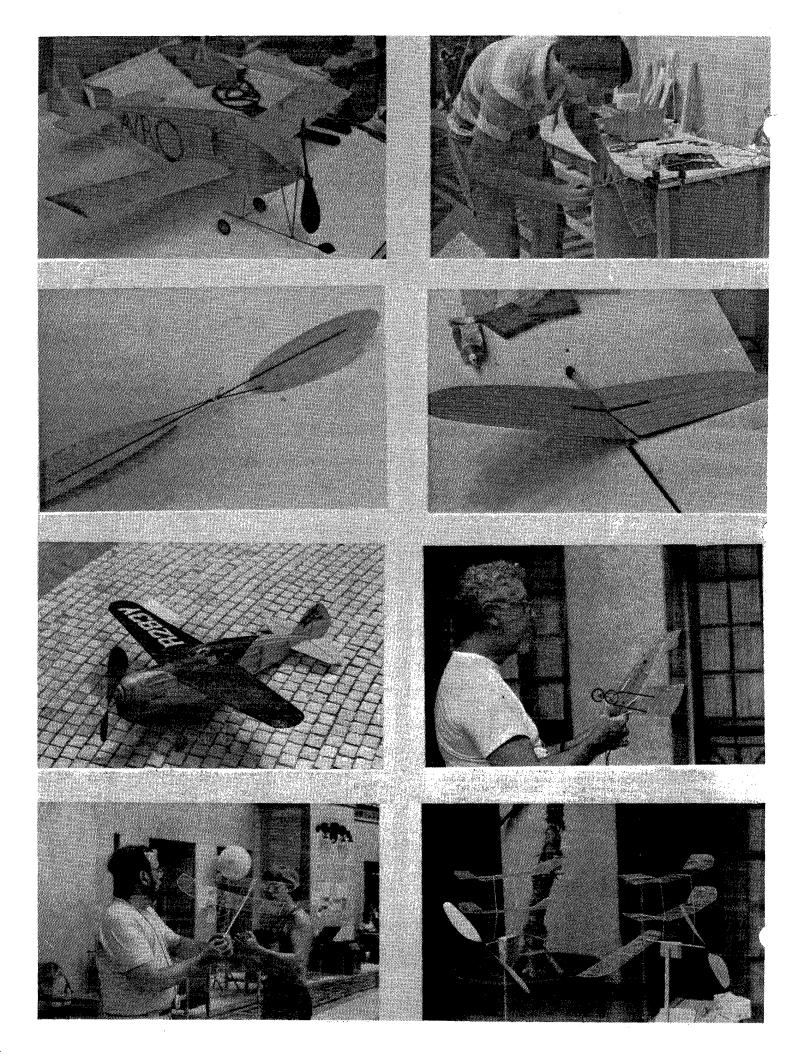
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Douglas Barber

Larry Loucka

Lew Gitlow





		Dan Polices II	106.7
AMA PENNYPLANE -	<u>Op.</u>	Dan Belieff II	106.7
AMMA PENNYPLANE - Dennis Jaecks Cezar Banks Dick Hardcastle ( Robert Warmann Larry Loucka Roman Szymula James Davidson Jim Jones	13:56.2 13:31.2	Bob Larsh <u>Mike Arak</u>	105.4
Cezar Banks	13:31.2	Us 114 Simmone	102 6
Dick Hardcastie (	time	Wally Simmers Bill Schlarb Robert Warmann	95.5
Robert Warmann	11:24.8	Robert Warmann	91.2
Doman Szumula	10:58.0	Maurice Whittmore	83.3
James Davidson	11:24.8 10:58.0 10:29.1 10:23.0 10:05.1	Maurice Whittmore Rex Powell Tom Killough Dan Belieff	95.5 91.2 83.3 74.4 73.2 65.7
lim longs	10:23.0	Tom Killough	73.2
Jim Jones Walt Van Gorder Maurice Whittmore Bernie Boehm	10:05.1	Dan Belieff	65.7
Maurice Whittmore	9.59.0		
Bernie Boehm	9.56.2	AMA SCALE - Jr. Graham Killough Brian Varney Liz Sanford Bryan Fulmer	Score
Gordon Wisniewski	9:49.1	Graham Killough	116
Earl Hoffman	9:31.2	Brian Varney	104
Ron Ganser	9:25.0	<u>Liz Sanford</u>	104
Lew Gitlow	9:19.7	Bryan Fulmer	103.5
Tony Sutter	9:08.3	Melanie Sanford	102
Maurice Whittmore Bernie Boehm Gordon Wisniewski Earl Hoffman Ron Ganser Lew Gitlow Tony Sutter Tony Italiano Robert Moulton Robert Oppegard Douglas Barber Carl Fries Jess Bacon Joseph Macay Walt Everson Otto Curth Del Ogren Arthur Adamison Charlie Sotich Pat Ciambrello	9:07.0	Kris Warmann	68.5
Robert Moulton	8:55.0	AMA SCALE - Sr.	
Robert Oppegard	8:27.1	Bradley Fulmer	115.5
Douglas Barber	8:13.7	Stef Sanford	107.5
Carl Fries	8:05.0	Glenn Campbell	99 5
Jess Bacon	7:52.7	Michael Gilbert	99.5 94.5
Joseph Macay	7:10.0	onaci alibert	31.5
Walt Everson	6:55.3	AMA SCALE - Op.	
Otto Curth	6:23.6	Ed Sto 11 (S	
Del Ogren	5:52.1	Tom Killough	,
Arthur Adamison	4:50.2	Joseph Macay	
Charlie Sotich	4:02.0	John Martin	
Pat Ciambrello	3:10.0	Phil Cox	
		Bob Clemens	
AMA EASY B - Jr. Robert Skrjanc Graham Killough Bryan Fulmon		Arthur Adamic in	120
Robert Skrjanc	14:25.0 8:56.0 7:18.3 6:23.0	Rob Willow	127
Graham Killough	8:56.0	1 lovd Wood	125 5
Bryan Fulmer Thomas Norell	7:18.3	Walt Everson	118 5
Thomas Norell	6:23.0	Martin Varney	112.5
AMA EASY B - Sr.		Curt Sanford	109 5
Mike Van Gorder	15:24.8	Mike Arak	99 5
Mike Clem	12:40.8	Rex Powell	89 5
Bradley Fulmer	7:25.0	Bob Clemens Arthur Adamisin Bob Willey Lloyd Wood Walt Everson Martin Varney Curt Sanford Mike Arak Rex Powell Pat Ciambrello Perry Peterson Jim Miller Jim Davidson	83.5
	7.20.0	Perry Peterson	79
AMA EASY B - Op.		Jim Miller Jim Davidson	78
AMA EASY B - Op. Earl Hoffman	21:56.8	Jim Davidson	78 78
Walt Van Gorder	20:34.0	Robert Warmmann	45
Dick Hardcastle	19:43.8		
Jerry Skrjanc	18:56.0	AMA PEANUT SCALE JR.	
AMA EASY B - Op. Earl Hoffman Walt Van Gorder Dick Hardcastle Jerry Skrjanc Lew Gitlow Bob Mullins	17:48.2	Bryan Fulmer	122
Bob Mullins	17:11.3	Graham Killough	118
Stan Chilton	15:57.8	Melanie Sanford	114
Cezar Banks	15:55.6	Thomas Norell	112
Roy Kerr	15:40.0	Bryan Fulmer Graham Killough Melanie Sanford Thomas Norell Arthur Adamisin Brian Varnen	103
Douglas Barber	13:55.6	Brian Varnen Kris Warmann	
James Davidson	13:20.6	Kris warmann	29
Carl Fries	13:09.0		
Tony Sutter	12:35.2	AMA PEANUT SCALE - Sr Bradley Fulmer	•
Roman Szymula	11:26.7	Bradley Fulmer	133
Rex Powell	10:22.0	michael Gilbert	113
Jess Bacon	7:59.5	Stef Sanford Glenn Campbell	110
Pat Ciambrello	7:21.0	Glenn Campbell	93
Walt Everson	5:22.6	AMA DEANUT COALE O	
Lew Gitlow Bob Mullins Stan Chilton Cezar Banks Roy Kerr Douglas Barber James Davidson Carl Fries Tony Sutter Roman Szymula Rex Powell Jess Bacon Pat Ciambrello Walt Everson Bill Bigge	4:33.5	AMA PEANUT SCALE - Op	214
TNDOOD HIG 7.		Jim Miller	
INDOOR HLG - Jr.	07.0	Arthur Adamisin	160
Kris Warmann	97.0	Bob Clemens Tony Sutter	146.4
Thomas Norell	96.3	Joseph Macay	139 134
Bryan Fulmer	92.7 79.6	Jim Davidson	
Paul Loucka		Earl Hoffman	133 132
Graham Killough	59.4	Pat Ciambrello	
Taylor Strack	21.3	Bob Willey	126.6 123
INDOOR HLG - Sr.		Curt Sanford	121
Mike Clem	96.6	Mike Arak	116
Bradley Fulmon	96.6	Perry Peterson	116
Bradley Fulmer Glenn Campbell	93.0	John Martin	114.6
a renn campbe I I	54.5	Martin Varney	95
INDOOR HLG - Op.		Walt Everson	75.8
Bernie Boehm	141.8	Tom Killough	73.0
Stan Stoy	134.5	Bill Bigge	73 29
	104.0	2.11 21390	

### **FOOTNOTES**

There's not too much room left, as anticipated; the fourpage format dictated by mailing weight restrictions (overseas) has proven to be somewhat limiting! So, here is a brief summary of the week:

Nats attendance was much higher, and by more of the top fliers, than in several years. If you want a good comparison, dig out a past issue of INAV and compare the number of entrants to this year's listing. It also seemed that there were a few more Juniors and Seniors than before. The reason is apparent; those who attended here were those whose parents cared enough to help, or to see that they got help, with indoor modeling. In other words, AMA has less of a "Junior" problem than a proble of insufficient involvement by adults in working with Junior fliers!

### NIMAS Non-INDEX Competition

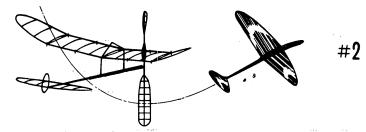
NIMAS Non-INDEX Competition									
Name	Age	Mode 1	Scale/Flight						
AMA Rubber Scale Butch Hadland Stef Sanford John Martin Melanie Sanford Liz Sanford Bob Clemens Jim Miller Paul McIlrath Curt Sanford John Martin	Op. Sr. Op. Jr. Jr. Op. Op. Op. Op. Op.	Lacey M-10 Lacey M-10 Alco Sport Lacey M-10 Lacey M-10 Granwell CLA-3 Currie Wot Glenny-Henderson Lacey M-10 Niewport 17C	85/69.4 54/91.5 72/73.0 49/91.6 49/90.6 84/43.6 66/58.8 10/114.2 64/54.2 61/109.3						
Peanut Scale Tony Sutter Jim Miller Mike Arak Bob Willey Liz Sanford John Martin Earl Hoffman John Martin Bob Clemens Melanie Sanford Plenny Bates	Op.	Heinkel 100 V-8 Vagabond Lacey M-10 Fike Lacey M-10 Niewport 17C Piper Vagabond Niewport Triplan Pacific Standard Lacey M-10 Old Ironsides	280/57.0 182/109.0 300/56.2 236/57.0 140.2/98 253.5/48.3 123/103 e 250.5/31.5 192/51.5 131.5/92.5 144/29.8						
CO. Scale Butch Hadland Bob Clemens Phil Cox	Op. Op. Op.	Lacey M-10 Farman Jabiru Wittman Buttercu	141/226 70.2/154.2 p 66.1/152.1						
Manhattan Cabin Walt Van Gorder Larry Loucka Ron Ganser Tony Sutter Dan Kilgore Bob Clemens		Age Op. Op. Op. Op. Op. Op.	Time 9:09.0 9:05.0 8:21.0 6:05.2 5:09.0 4:31.7						
Bostonion Cabin Bob Clemens Martin Varney Paul McIlrath Walt Everson Del Ogren Carl Hedley	Age Op. Op. Op. Op. Op.	Charisma 1.2 1.1 1.05 1.05 1.0	Score* 346.8 321.31 233.83 191.63 188.5 173.36						
*Score = (three fl	ight to	otal) x Charisma							
"Old" Easy B (Sepa Stan Chilton Walt Van Gorder Dick Obarski Gerald Skrjanc Mike Van Gorder Doug Barber	op. Op. Op. Op. Sr. Op.	ophy)	Time 20:50.7 19:43.4 18:13.0 17:09.0 14:54.0 13:03.8						
<u>0t</u>	her NIM	AS Index Flights							
Name Lew Gitlow Ron Ganser Rick Doig Stan Chilton Jack Carter Stan Chilton Jack Carter Gerald Skrjanc Roman Szymula Jess Shepherd Robert Skrjanc Walt Van Gorder Dick Hardcastle	Model Ornith Cabin Cabin Paper Indoor FAI St FAI St	Class Age op. Op. Op. Op. Stick Op. oick Op. oic	Time 3:06.2 24:04.0 21:20.7 23:14.7 21:33.0 35:16.3 27:10.3 26:05.8 25:58.8 24:42.5 15:28.8 21:36.8 21:28.0						

One non-flying event of momentous import happened. Dick and Nicki Hardcastle, from the St. Louis, Missouri area, showed a really super indoor film which was very well received. It was a superbly photographed and staged documentary of the 1981 World Championships, flown at West Baden last year. This film will soon be avbailable through AMA Headquarters, and should be viewed by all clubs!

### ONE LAST WORD

If you followed the exhortation to examine your mailing label and didn't find a number instead of a date, it's because I ran out of time to finish updating the records; electing to get this issue out before it died on the vine!





# NEWS and VIEWS Editor: Bud Tenny · Box 545 · Richardson, Texas · 75080

\*\*\*\*\*NATIONAL INDOOR MODEL AIRPLANE SOCIETY\*\*\*\*\*

### This Issue

As a reminder, this is the second issue (see upper right As a reminder, this is the second issue (see upper right corner of the masthead) under the new arrangement where issues are numbered sequentially and the current date is put on the masthead. So, to tell when your own subscription expires, look at the upper right-hand corner of your address label. When the issue you receive has the same number as that on your label, you have the last issue due under your subscription. In response to many requests, the current membarship rates (including INAV) appear helow. membership rates (including INAV) appear below:

Members on North American continent: \$4.50/12 issues.

Other subscriptions: \$4.50 + postage surcharge. Postage surgharge for seamail: \$1.50 (total cost \$6.00). Postage surcharge for airmail: \$2.50 (total cost \$7.00)

### Missing Issue #1?

If you did not get an issue with #1 on it, but were supposed to, drop me a line. I found out the hard way that some of the labels had defective stickum. I noted that many were not sticking well, so I taped them down. Apparently I missed some, since a few issues came back with no labels, but with a sticky, dirty place showing where the label used to be! Of course, this gave me no clues about whose issue it was, so I'll have to rely on you!

### AMA Election Under Way

By the time you receive this, most AMA members will have received their ballot for the 1981 Officer Elections. This year, the odd-numbered Districts are electing Vice Presidents, and the office of AMA Secretary-Treasurer is on the ballot for all members to vote on. The incumbent S/T is Jim McNeill, who has done an excellent job. I don't know exactly why his name was left off the ballot, since he was nominated. I personally was left off the ballot, since he was nominated. I personally believe that he deserves to be presented on the ballot. Since he is not, you must write in his name if you feel as I do and wish to vote for him.

### \*\*\*An Important Book! \*\*\*

Some of you may have been fortunate enough to have seen and perhaps buy a copy of "BUILDING AND FLYING INDOOR MODEL AIRPLANES", by Ron Williams. This book tells all you wish you knew about indoor modeling, but din't know who to ask. The book covers not only start-up information for all kinds of indoor models, but also tells many of the finer points as

The book contains an unbelievable variety of information, and is profusely illustrated with both photos and hand-drawn illustrations. One of the big difficulties of getting new people into our ranks is how to let people know what we are about and how to build these unusual models we are obsessed with. This book, made available to young people, certainly can help to spread this information. To that end, I have donated a copy to the Richardson Public Library. I hope that this will seem like a good idea to many of you, and that you will follow suit in your own neighborhood. If you can't afford this, show your copy to the head librarian and see if you can't get the library to order their own copy. If you don't have a copy yet, you are missing out on one of the most important events of the past several years! You can get your copy from Simon & Schuster; in paperback for \$12.95. Hop to it!

### Another NIMAS Member Dies

We were recently notified that Maj. Gen Franklin Davis, retired career officer and long-time NIMAS member, died on May 4, 1981. Those who knew him will miss his activity and enthusiasm.

### FAI TEAM SELECTION FINALS

Elsewhere in this issue are shown the results for the Team Selection Finals, held at Santa Ana on Labor Day Weekend. Besides the results as shown, it is worthy of note that 1st runner-up Dan Domina passed up the offer (traditionally made,

not required) to be Team Manager. Bud Romak, the next runner-up, accepted the nomination and was elected Team Manager. Bud as a number of years of experience as team member, along with a significant amount of experience managing his own business; he will be an excellent manager. Congratulations and best wishes to Bud and team members Cezar Banks, Ray Harlan and Jim Richmond! It is currently expected that Erv Rodemsky will also fly at the 1982 Indoor WCh to defend his title. The current expectation is that the 1982 WCh will be in the Romanian Salt Mines Romanian Salt Mines.

### New Team Selection Committee Members

In fairly recent past history, there were two vacancies on the Team Selection Committee; Ted Gonzoph died last year and C. V. Russo resigned this year. Manny Radoff was elected by fliers from District II to replace Russ, and Stan Chilton was appointed to replace Ted.

At the time of this writing, an election is under way to replace Jim Richmond as Chairman of the Committee, who resigned after doing an excellent job. Thanks to Jim, nd congratulations to Stan and Manny!

### NATIONAL FREE FLIGHT SOCIETY

The time has come for making nominations for the two special awards made annually by NFFS, with nominations being accepted until Jan. 1, 1982 for the following categories:

Top Ten Models Of The Year. Send nominations to Graunke, 15260 Heather Hill Dr,m Brookfield WI 53005. Send nominations to Gil

1982 Free Flight Hall of Fame. Send nominations to A. J. Italiano, 1655 Revere Dr., Brookfield WI 53005.

### CONTEST BOARD ACTION

Although official announcement has not been made, Although official announcement has not been made, the recent Free Flight Contest Board voting has approved a return to rules for Easy B similar to those in effect when the microfilm-covered model was created. The major difference is that Easy B reamins an official event rather than a provisional event as it was originally. Thus ends an unfortunate series of happenings which did nothing to promote model aviation in general and Indoor in particular. Hopefully, both the fliers and the Contest Board have gained insight and experience. insight and experience.

# NATIONAL RECORD ACTIVITY

Three fliers are due congratulations for their flight activity in recent months. First in order of occurrence: Mr. Hideyo Enomoto of Japan set a new FAI Cat. I World Record in March, 1981; the time was 25:24. The previous mark was held by Tom Vallee.

On the local scene, Warren Williams claimed Lew Gitlow's AMA Cat III Helicopter recorrd with a flight of 10:07 at Santa Ana during July. Then, in August, Tom Vallee set a new Cat I Paper Stick record of 16:04 and a Cat I H.L. Stick record of 22:26. Trying again in September, Tom then logged 23:32 for a new Stick record and 23:14 for a new AMA FAI Cat I record of 23:14. 23:14. Each of these fliers deserve our applause; not many of us are pushing for new records at this time!

### CONTEST CALENDAR

CALIFORNIA - San Diego

The San Diego Orbiteers continue their monthly informal contests after club meetings at the Colina Del Sol Gymnasium. The next scheduled event is set for Oct. 23, 1981. Contact Howard Haupt for more info; ph. 282-4886.

KANSAS - Overland Park

Roger Schroeder has organized a series of indoor flying sessions at the Westport Roanoke Community Center, 3601 Roanoke Rd, Overland Park. The sessions are set for Nov. 28 and Dec. 12, 1981, and Jan. 16, Feb. 14, Mar. 14 and Apr. 14, 1982. The first three sessions are Fun Fly sessions from 3 pm to 5 pm and the other two are contests to be held from 3 pm to 7 pm. For more details contact Roger at 4111 W. 98 St., Overland Park KS 66207, ph. 648-4265.

MISSOURI - St. Louis

MISSOURI - St. Louis

Jim Bennett, 324 Helfenstein Ave., St. Louis MO 63119,
sent this schedule for indoor contests in the area: Oct. 24,
1981, St. Louis Armory, Easy B, HLG and Indoor Scale; Cat. II;
49'. Other meets: Nov. 15, Dec. 13, 1981 and Jan. 17, Feb.
14, Mar. 14 and Apr. 14, 1982. All those meets presumably
scheduled for the Armory; all are AMA Class A meets except for
the Apr. 4 meet, which is Class AA. Contact Jim for more
details.

OKLAHOMA - Oklahoma City
The Sooner Free Flight Society will hold an AMA Class AA indoor contest at the National Guard Armory, 200 NE 23rd St., Oklahoma City, Dec. 13, 1981, from 8 am to 5 pm. Events: HLG (8 am to 10 am), "old" Easy B, Pennyplane, Paper Stick, Peanut Scale (AMA Rule #58), AMA Scale, Bostonion and Novice R.O.G. Contact Bill Baker, 1902 Peter Pan, Norman OK 73069, ph. 405-329-1018 for more details.

### GLUE THE KNOT!

The material to follow is Stan Chilton's descrip-The material to follow is Stan Chilton's description of how to make motors by glueing the rubber instead of tying it. The major benefit to be gained is that the rubber has far less tendency to break at the knot when under high stress (during winding, primarily). Stan usually is surrounded by broken motors at the end of a contect day, and he maintains that most of his broken mtor problem has been failure at the knot. Stan comments:

After trying quite a few knots (and breaking them either while tying them or testing them), I ended up with the following which works better than anything else I tried.

Lay out a piece of rubber about 1" longer than Lay out a piece of rubber about 1" longer than required for the size loop you want to end up with. Double (fold in two) the strands keeping them flat to each other and mark the exact length of motor you desire using a pen called a "Sharpie". It is a felt tip pen with a fairly sharp conical point and has permanent ink, probably some sort of cellulose base. Mark the rubber loop with the mark starting at the point of exact length you want, with the rest of the mark being on the outsie of this exact length.

Begin by slipping on "O" rings if you use them, then take a scissor-type locking clamp and clamp the two loose ends together about 3/16" from the end. Hold the clamp handle in a vise and stretch the rubber loop over to an anchor so the rubber is stretched to about five times its normal length, with the mark visible. I use obsolete water-soluble rubber lubricant and put a very small amount around the marked area of the motor, using a small screwdriver. This sounds crazy, but it keeps the rubber from abrading itself at the knot. I then take some carpet thread ntself at the knot. I then take some carpet thread (not nylon--maybe cotton with some dacron) and wrap this around the motor about three times, beginning at the loop end of the mark, and then tying a couple of overhand knots as tightly as possible. From the knot side you can see just two wraps of thread. The carpet thread should not be so small as to cut the rubber and to the big it is heavy or applied. not so big it is heavy or unwieldy.

I actually wrap this thread around the motor about three times, beginning at the loop end of the mark, then tying a couple of overhand knots in it. I tie as tightly as I can--from the knot side you can see just two wraps of thread.

Release the tied motor from the latched clamp and wash the motor and the knot clean. Dry it well with a wash the motor and the knot clean. Dry it well with a clean cloth--when dry, especially at the knot, it must be glued. Put a drop of Hot Stuff on a piece of glass and use the 1/32 teflon tubing which comes with the glue to dip a tiny drop into the crotch of the loose ends of the tied loop. If you are very steady, put a very tiny drop on the knot in the thread. Be sure not to get any Hot Stuff on the motor itself! Blot off any excess glue and trim the ends of the rubber.

I am using a rubber lubricant consisting of boiled green soap and glycerin, and pure stinking lanolin-boiled to a cold cream paste (when cool) and adding about 1% vegetable base carrier silicone. This lube works as well as any I've ever used, and continues to work well when the motor is dry.

I keep all my rubber, both motors and skeins, well dusted with Johnsons Baby Talc. I also wash motors after each flying session and use more talc. The only trouble is that you have to wash each motor before using it, so locate your flying box near either a water fountain or a rest room, or take a supply of water to wash motors with.

As a result of using this method of tying motors, I break less than 1/3 as many motors as before, yet each motor is wound to at least 90% of full turns before backing off to the desired launch torque.

### NOT ANOTHER PROPOSAL!

During the recent Team Selection Finals, a great number of models were lost by even the most experienced fliers, in one of the best Cat. III sites in the world. Erv Rodemsky contends that this is due to the continuing evolution of the FID model, which leads to the models spending great amounts of time near the ceiling. Although I'm not sure I agree with all of his proposal (printed on page 4), I agree that there is a problem and that he has made many good points. Read it, make up your own mind, and comment either to Erv, or to INAV. If you wish, your comments, pro or con, can be aired in INAV. Erv's address is 26 Warmspring, Irvine CA 92714.

### OLD, BUT INTERESTING --

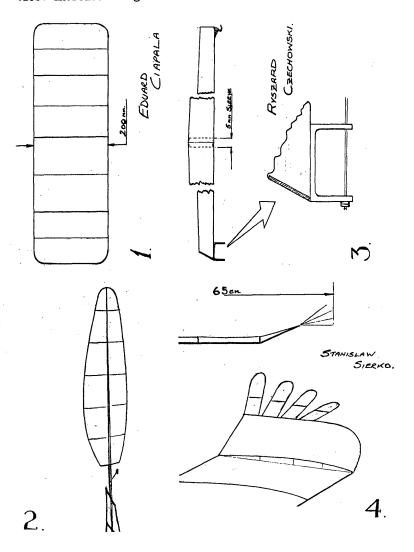
Sometimes I get an item which gets lost in the shuffle or is crowded out of the issue it should have been to be timely. The material below was furnished by Ed Whitten, from a letter he received in 1979. Ideas seldom go out of style, so here are some different ideas!

NOTES from the 6th International FlD contest at Wroclaw, Poland, Sept. 20-23,1979:

- Eduard Ciapala (Polish national champion) un-usually large chord wing (large for Continental designs) approaching 200 sq. inches area. Not used in contest.
- Sylvester Kujawa Propeller with abruptly square cut hub purely experimental no conclusions formed.
- Ryszard Czechowski (1974 World Champion) Tapered/ spliced stick. Tapering is not new, but splicing appears original approach. Theoretically resists bending loads better than parallel stick. Important feature is that it is economic on wood. With care one can make two sticks from one sheet.

Also nose bearing - immaculately machined from solid - stronger than 'bent-up' variety - however, more difficult to adjust thrust line.

4 - Stanislaw Sierko - A quite startling wing design giving appearance of wing tip feathers. Intention is to smooth out airflow/tip vortices a la Hoerner tips. Thought to be of questionable advantage at FID airspeeds. Penaltics, increased which and loss of area. ties: increased weight and loss of area.



Plac	е	1	2	3	4	5	6	7	8	9	Setal	Points	Prev Points	Total Points
1.	Banks	***	41:11	43:35	6 <b>:</b> 35	ASS COMPLETE	The Sta	41:32	2:06	a report of the	85:07	1000	•	1110.0
2.	Harlan	23:11	6:29	40:49	36:42	40:41	39:24		39:29	11:19	81:30	975.5	110.00	1067.5
3.	Richmond	6:34	38:16	38:21	38:03	12:55		41:54	38:46	31:16	80:40	947.7	110.00	1057.7
4.	Domina	36:29	39:22	37:05	37:28	37:01	7:59	38:38	38:28	40:40	80:02	940.3	110.00	1050.3
5.	Romak	25:49	38:36	34:21	24:21	41:30	28:26	35:06	36:04	11:19	80:06	941.1	105.40	1046.5
6.	Mather	33:52	39:35	38:59	35:11	28:42	36:09	38:47	35:45	38:17	78:34	923.0	107.26	1030.3
7.	Cannizzo	33:16	5:07	34:09	8:01	38:10	38:54	9:18	26:50	36:24	77:04	905.4	104.58	1010.0
8.	Randolph	3:19	33:37	23:27	28:37		33:13	35:18	28:55	38:04	73:22	862.0	92.81	954.8
9.	Calliau	30:32		34:41	31:39	37:03		17:54			71:44	842.8	109.29	952.1
10.	Hagen	27:26	37:30	34:18	24:53	9:01	22:06	29:06	17:47		71:48	843.5	105.16	948.7
11.	Hulbert	29:30	34:18	30:51	24:51	34:28	35:15	33:36	00:03		69:43	819.1	105.22	924.3
12.	Doig	6:13	32:17	21:58	34:25	34:37	11:24	31:29	35:04	33:33	69:41	818.7	97.83	916.5
13.	Gitlow	14:00	7:22	29:18	17:27		35:35	1:12	30:11	33:56	69:31	816.7	82.64	899.3
14.	Gibbs	27:49	20:02	1:30	14:27	32:32	7:10	34:25	32:07		66:57	786.6	110.00	896.6
15.	Stoll	20:26	31:33	33:55	26:31	32:23	32:15	24:03	8:41	30:04	66:18	778.9	95.61	874.5
16.	Hoffman	12:30			•	32:42		31:53			64:35	758.8	104.68	863.8
17.	Radoff	26:57	33:34	22:43	25:50	32:14	2:10	25:38	28:47	5:13	65:48	773.1	84.98	858.1
18.	Faykun	15:06	32:15	16:50	26:50	29:49	25:53	28:34	2:35		62:04	729.2	101.37	830.2
19.	Ganslen	20:41	24:17				19:32	12:12	20:20	21:03	45:20	532.6	108.34	640.6
	•									Ere	v Z	oden	uske	ررا
											demsky t Dire	ctor	0	

# 1982 INDOOR TEAM-SELECTION STATUS

Contestant	Akron	Santa Ana	West Baden		Lakehurst	Denton, Tex	Akron	Points	
	Regional	Regional	Regional	Regional	Regional	Regional	Regional	from	Program
	9/2/80	11/15-16/80		6/21/81	7/4-5/81	7/26/81	8/1-2/81	best	Points
	time/points	time/points	time/points	time/points	time/points	time/points	time/points	Local	to date
Banks		67:05/100.0							110.00
Belieff		,		•	39:15/55.37			10.00	65.37
Brodersen								5.99	5.99
Calliau		57:13/85.29	68:28/100.0					9.29	109.29
Cannizzo		21 21		, and the second se	67:18/94.94			9.64	104.58
Carter	42:59/46.67		42:25/61.95					8.09	70.04
Chilton	12.777.2027		65.14/95.28					10.00	105.28
Clem, J.			-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				İ	10.00	
Clem, M.								10.00	10.00
Crane						ł		8.13	8.13
Doig	69:23/75.33		57,07/83.35				72:53/87.83	10.00	97.83
Donina Domina	07.27/17.77		7110170707		70:53/100.0				110.00
Faykun		63:12/94.21			1				101.37
Ganser	63:47/69.25	0).12/ / 1021	39:52/58.23			l	67:47/81.68	8.26	89.94
Ganslen	07.47707.27		77.727 30.27				111//	8.48	89.94
Gibbs		50:19/75.01		81:10/100.0		ĺ	1		110.00
Gitlow		49.58/74.49		01110/10000				8.15	
		63.50/95.16				ł			105.16
<u>Hagen</u> Hardcastle	<del> </del>	07.707 77.10	55:50/81.55						81.55
	86:44/94.17		77.70701.77				82:59/100.0	10.00	110.00
Harlan	00144/94,17			<del></del>			02.2//100.0	3.22	3.22
Haupt	f .		(r. 20 /or 80			1	1		104 68
Hoffman	52 45 /04 /5		65:39/95.89			<del> </del>	79:17/95.54	0 68	104.68
Hulbert	75:13/81.67		02123/91.02				17011/7707	10.00	10.00
Kulzer	121. 12. 12. 0.0						72:46/87.69	1.80	
Loucka	64:43/70.27	(4 .00 /04 .00	1	78.57/97.26			12.40/0/.09	10.00	107.26
Mather	1 1 5 70	61:38/91.88	59:11/86.44	7015/797.20			77:38/93.55	10.00	107 55
Obarski	74:43/81.13		59111/00.44	l			11110193133	0 41	103.55
Platt					53.33/75.55			9.43	84.98
Radoff		r. 00 (00 00		55:18/68.13	ככיכז /ככיככן	1		8.83	92.81
Randolph	1	56120/83.98		33110/00-13		<b></b>	<u> </u>	10.00	
Richmond	92:06/100.0	(1, 00 /07 10	1	İ					105.40
Romak		64:00/95.40			53:30/75.48		<u> </u>	10.00	75.48
Russo		ł	ļ		> > + > > + > + > + > + > + > + > + >			1 42	75.40
Shailor								5.62 9.85	5.62 9.85
Shepherd			10 10 - 1.			1	ŀ		9.05
Stoll .			58:37/85.61		<u> </u>		<u> </u>	10.00	95.61 80.48
Szymula			55:06/80.48			I	ļ ,		
Tenny	<u> </u>			<u> </u>				3.08	3.08
Tryon	1	1	63.17/92.43	I		1	100 44 /00 00	8.52	100.95 96.27
Van Gorder	59:35/64.69						73:14/88.25	8.02	90.27
Williams, W		49:55/72.92		1	1			0 71.	72.92
Skrjanc	<u> </u>	<u></u>	ļ		<b> </b>	<u> </u>	<b></b>	2.74	2.74

# Proposed F1D Rule Change

Back in the '60s, when indoor was first accepted as a world championship event, the ultra simple rules (90 CM wingspan) produced big, beautiful models, but the event was so intimidating that one world championship was cancelled due to a lack of interest. Against strong U.S. opposition, the CIAM reduced the wingspan to 65 CM to make carrying the boxes on public transportation more practical. After two world championships with the smaller, extremely light models, the one gram rule was adopted to increase model durability. Both size reduction and the weight rule increased popularity of the event resulting in more countries than ever sending teams. Now, after ten years of stagmant rules, the models with wide chords, long motor sticks and big props require boxes that are as large as the 90 CM models. They spend more time rafter banging and are constantly being destroyed in shipping and handling. During the recent U.S. team selection contest, virtually every "world class" flyer blew one or more models, six by Cesar Banks, six by Bud Romak, three by Ray Harlan and three by Larry Calliau. This is a situation like washeliel before the rubber weight limitation. There has to be something wrong when the world's best flyers smash a model every other flight. How can you reasonably expect anyone new to waste such time and money. Undoubtedly some "die hards" will give it up if there is a rule change as happened in Wakefield, but when the new people come around, it will be bigger than ever—as Wakefield with its 50! entrants at this year's branch on the arrline baggage smashers in order to participate in seminative connections on the health one or eight ships and then sweat as and and the sound in weat seminated to build and test six or eight ships and then sweat in seminary or connections. serious competition.

# Santa Ana Stick

- Wingspan 60 CM (23.622")
- Length excluding prop 60 CM
- Weight excluding rubber one gram ë
- Horizontal area of lifting surfaces 1200 CM $^2$  (186 sq. in.). Biplanes must include area of both wings. 4.
- Motor weight ½ gram 5
- No gears for motors or mechanical gadgets to change proppitch or flying surfaces. All configuration changes must be aerolastic.

This produces a model that will fit in a two foot box, carried in the cabin of an airplane, and have an average wing chord of 5.276", assuming a 33% stabilizer. Since these models will be stronger, they will better be able to take a fully wound motor, thereby making rubber other than Pirelli a viable option. FAI Supply, for instance, is not as subject to breakage and has more energy storage, but most of that is at the high end and cannot be used by the present models. In testing on half motors, I find it great fun to see just how the model flies jight motor. with a wir

Some of you may feel that reducing the size is all right, but limiting rubber is a bad idea. Unless we limit the rubber, motor sticks will get even longer than at present; and since the models will be stronger, they will be wound tighter with huge motors and spend even more time at the ceiling, drifting to the sides, getting hung and being destroyed. Limiting rubber to a gram will go a long way toward preserving your best models. I've heard that this will put a premium on rubber quality, but this has always been the case. If you have poor rubber, adding more it will not solve the problem, only make the model heavier. The motors could be processed, sealed and kept by the timer after you process. You would need to process several bands to cover breakage when you are ready to fly. I feel that these planes will be capable of 30 minute flights. In testing on a motors (approximately 2/3 gram rubber) with 2/3 gram of ballast and overweight models, I've been able to do over 21 minutes many times. So, I'm sure that these models will score respectable times even by today's standards. Other benefits of this proposal are: wood quality is less important, bracing is simpler, the weight of plug-in tail booms can be tolerated for packing ease, and film frames can be smaller, making lifting and storage less of a problem.

I realize that this constitutes a complication of processing, but most other FAI classes are much more restrictive than this. At our team selection, less than two minutes per plane were required for weighing and measuring and no delays were encountered. Processing of the wing and tail areas could be done by a certificate of compliance and in case of doubt, a complete check made. The contestant would be required to submit full-size cardboard templates of the projected lifting surfaces. These could be used to cut out tissue patterns and weighed, or one of those perimeter tracing gadgets which measure area directly could be used. Let's not specify a chord length, as this really causes everyone to make square

These rules have been called a "one design" contest, but there would still be a great deal of latitude for variations in planform, airfoil selection, prop design, area distribution, center of gravity location, rubber handling ability, etc. Let's face it, the present models are very difficult to build down to weight with adequate strength for air loads, handling, tight motors, steering, and shipping.

I intend to build a model to these specifications for demonstration purposes (Boy Scout groups, etc.), as it will certainly be more practical to fly in a small room. So how about all of you who have expressed interest building for a contest at Santa Ana on December 20 or January 17? Please let me know if you have any strong opinions about modifications to the above proposal. With apologies to those who disagree, I've given this a lot of consideration and sincerely think that these rule changes would benefit the sport, increase competition and insure the future of FID indoor flying throughout the world.