CENTRAL INDIANA AEROMODELLERS

INFORMER

FREE FLIGHT NEWS OF THE MIDWEST

* The Weather *
Clouds congregate and dump their freight!

- Editor -
Moe Whittemore
2348S, 700W
New Palestine
IN 46163

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"Pickling" Your Engines ...

No joke!! Frank Heeb tipped me off on this one. Seeme that he ran into severe corrosion in a TD .020 after only 10 minutes running with 40% RedMax fuel. Then he ran across a Texaco ad/article that supplied some answers to this common model engine problem.

People actually *do* pickle, or preserve their racing engines in the off-season. To pickle is to prevent corrosion. Only the engines that run on exotic fuels seem to require it - mainly the methanol burners. Why?

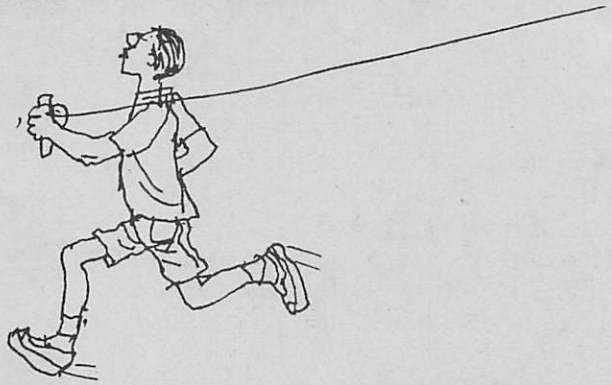
Methanol corrodes engine components. Over time it will eat into aluminum and magnesium 'like a frog eats grasshoppers'. In a classic example, one of our own Agents had his antique alloy engine reduced to a pile of *powder* after letting it soak for a few months in FAI fuel! Only the steel parts remained recognizeable, but badly corroded. Franz Weis, rebuilder of the racing Chevy V8's says: "If you let methanol stand in a racing engine, you'll get white deposits that indicate corrosion in aluminum & steel. What we do when we're finished tuning an (alky) engine is run it a while on gas. It gets in there and flushes out all the glop!"

Sounds like a gasoline soak prior to lubrication and storage is just what the doctor ordered. Frank also mentions that some RC fliers use a similar scheme running a *lighter fluid prime* thru their engines prior to lubrication for the long winter's nap.

Some other interesting info gleaned from this article which may have a parallel in modelling circles is the difficulty in starting high-nitro dragster engines when "cold". A shot of gasoline is used to get things going until the cylinders heat up. In addition, "cold" nitro tends to throw oil on the top of the pistons. This is cleaned out with a shot of gas and more running.

Whew!! These kinds of precautions were probably unheard-of back in the 'white gas & oil' days of modelling. It may help to explain how some of these old engines survived in such good shape for us to use today - and why some conversions went to

(cont'd p 4)



Simplex Airfoils Revisited ..... From the pen of regular contributor Gil Morris (bless him!) comes this rerun/reminder on the Simplex airfoil. They're so useful and versatile we decided to run 'em again. In case you don't remember why they're so neat, let me remind you. For a given "rib" of this log spiral curve, you simply pivot on the leading edge while chopping off the trailing edge to get a family of perfectly matched, but varying length ribs. Simple 'n neat! Should be a killer indoor rib technique - if you're willing to break away from the circular arc tradition and want to experiment with a more forward high point.

For anyone desiring to try to generate these curves (or custom variations thereof), the equation of the logarithmic spiral curve is:

$$r = ae^{cx}$$

where radius (r) and angle (x) are polar variables; a is any convenient scaling constant, e is 2.71828 and c is as follows:

Airfoil Thickness	C
1%	36.44
2%	18.21
3%	12.13
4%	9.089
5%	7.313
6%	6.101
7%	5.224
8%	4.562
9%	4.044
10%	3.629
11%	3.292
12%	3.011

For those of you who don't want to mess with the math, the 1% - 12% curve sets are to be found on page 3.

CIA Welcome Mat ..... Say **HI** to new CIA Agents Marvin Jordan of Rensselaer, IN and William McFarland of Biloxi, MS. Agent and cofounder Phil Sullivan re-joins the ranks from Richmond, VA after a long absence! We notice that Dick Patton from Springfield, OH; Jerry Barnette of Fredericksburg, VA and Warren Curth from Davenport, IA have swapped subscriber for membership status! And welcome aboard to new subscriber Ken Lazarus, from Cincinnati, OH.

If any of you happen to be passing through the Indianapolis area and find yourself in need of a hobby fix, stop off at Tom Metzler's Hobbies, 7418 S. Madison Ave. We're trying to build up our free-flight inventory, despite the wimpy sales in the light of the hi-dollar, hi-markup R/C car business!

We carry a fairly complete line of Lee Campbell's kits (plus others) and even keep our FAI tan rubber in the fridge! Tom also manages to keep a good supply of 4-6# balsa, when others can't seem to obtain it. We're going to try to lay in a stock of composites (carbon fiber, structural foams, etc.) for our competitive clientele. If you don't need anything drop in anyway. Say hi and browse! - MJW

Speaking of Composites ..... A source for all the wonderful materials mentioned above, plus vacuum techniques' equipment for producing lightweight flying surfaces is CST - Composite Structures Technology, PO Box 4615, Lancaster, CA, 93539. This is a new address for them (as of about October). Drop 'em a line. They'll be happy to send you a catalog.

Might as well give a plug to the competition. MRL (Model Research Labs) has a similar line of goodies, plus extras like aluminum wing skins. Curt Stevens runs the show, and has been doing this since '81. (I buy my 59 millionths mylar indoor covering from him.) They're located at 25108 Marguerite #160, Mission Viejo, CA 92692. Ph: (714) 240-8433. Call after 8PM.

Final Reminder for 1990 ..... If you haven't already done so, CIA Members tally up your 1990 contest successes and report them on the Contest Points Claim Forms furnished in your membership kit. Send 'em to Harry Murphy, 3824 Oakwood Blvd, Anderson, IN 46011. If you don't get your claims in, Elmer Jordan will win all the trophies again, even the Jr/Sr ones !

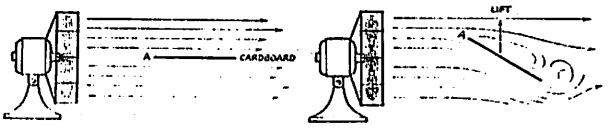


Dirty Harry Said That ..... "I am certainly happy that model airplanes are just a hobby with me and not an obsession. Why, I can leave them alone for 10 or 15 minutes at a time and it doesn't bother me at all ...."

Correction !! When we err - as everyone does on occasion, we like to set the record straight. Thus, this correction is due in regard to the aforepublished results of the CIA OT and NosGas Meet of July 28/29 in the A/B Pylon event. The correct results were:

1.	Gene Bowers	416
2.	Larry Willis	360
3.	Dan Harshman	339
4.	Harry Murphy	323
5.	Guy Scott	319
6.	Bill Hale	318
7.	Elmer Jordan	192
8.	Dick Patton	59
9.	Bob Placier	--

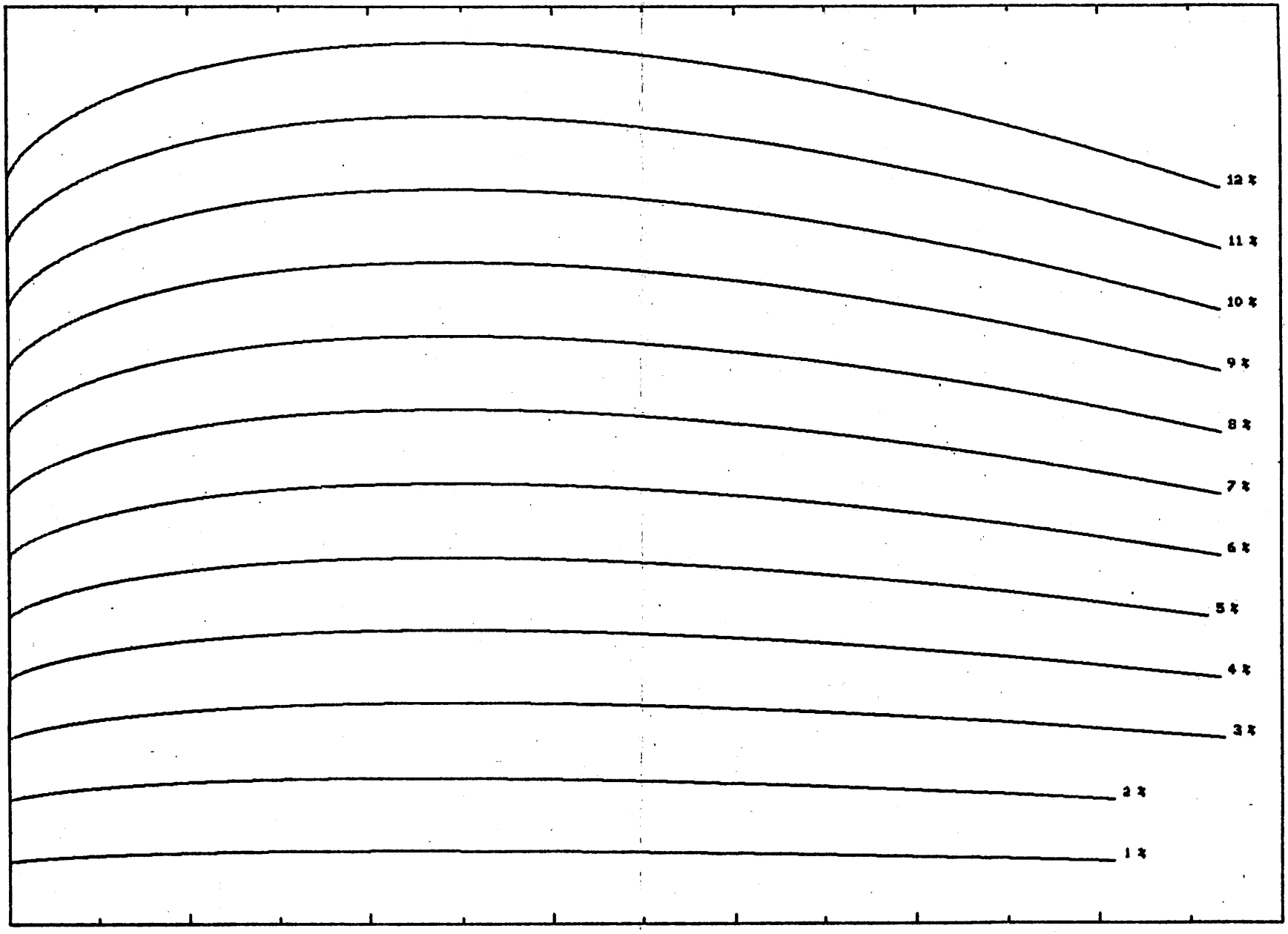
Dan Harshman was inadvertantly left out of the previous results. Sorry about that, Dan !



Action of air stream on horizontal plate

Action of air stream on tilted plate

A FAMILY OF SIMPLEX AIRFOILS



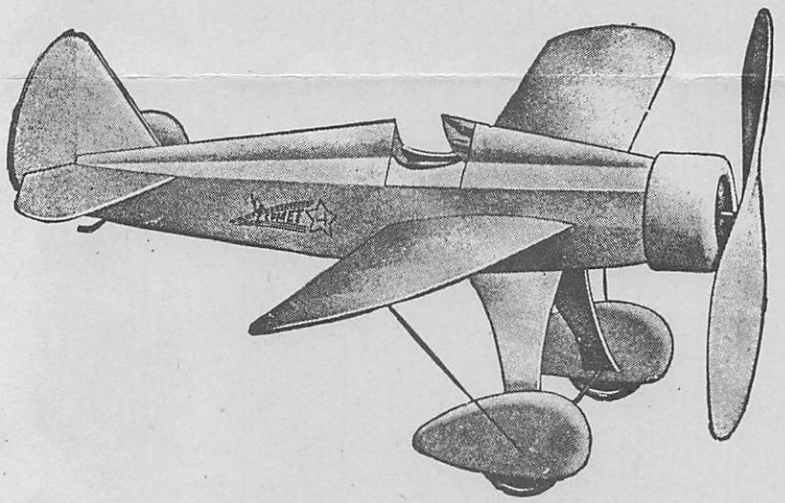
(Pickle Your Engine ..... cont'd)
hell so quickly; their demise probably coincident with the increase of alcohol based glo fuels. Cleanup back then was possibly nothing more than a casual wipeoff of the fuel residue after a day of flying fun; the owner being totally oblivious to the damage gradually being done on the inside. I know *I* never gave it a second thought!

I hear there's a movement afoot to allow alcohol/nitro fuels in O.T. engines. Be advised. - MJW

New Officers On The Block ..... As a result of the last CIA elections, those who couldn't defend themselves were elected as follows for '91:

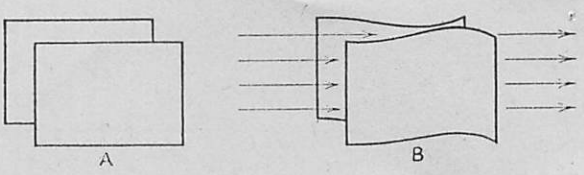
President: Meredith Chamberlain
Vice Pres: Les Hallgarth
Sec'y/Treas: Harry Murphy

(Actually, Guido Speedy was originally elected Secretary/Treasurer but defended himself well enough to escape the chore!)



For Those of You Into Swap Meets ..... I've just received notice of the "All New" Swap Meet to be held Mar 2, 1991 from 2P until 10P at the VFW Post in Middletown, KY. Admittedly R/C oriented, this fairly large event covers all areas of modeling - planes, choppers, boats, cars and yes, trains! Sounds like there'll be food, door prizes, giveaways and constant videos going on.

Cost is $3.00 a head for spectators, and $2 per person extra for having a table. If you have any questions, contact Rob Gernert at (502) 896-4049 or John Glauber at (502) 222-1907.



Effect of release of pressure

About James B. Cahill ..... Frank Heeb sends us some additional information about the late Jim Cahill, which will be of great interest to all modelers.

Jim was a charter member of the Purdue Aeromodellers, and had just graduated with distinction in Mechanical Engineering when Frank first met him. This was the summer of 1940. Jim got Frank started in both indoor & outdoor rubber contest flying - the foundation of Frank's current love of modeling. Seems like 'spreading the model gospel' and helping others was a thing Jim did a lot of. While an employe of Roots-Connersville Blower, he anticipated the current emphasis on volunteer service to others by developing a Model Airplane Club for high school boys. Financially, the club was assisted by the Vultee Aircraft Co.

Cahill achieved early fame when he won the International Wakefield Trophy in 1937 in Paris with his model "Clodhopper". He was the 1990 inductee into the AMA Hall of Fame, and his Clodhopper will be placed on permanent exhibition when the new museum complex is completed in Muncie.

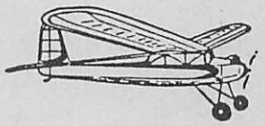
Jim grew up in Indianapolis, and following his career in Connersville he worked in the development of space technology at Sandia, San Diego and Huntsville on such projects as the Atlas missle, the first man-in-space, the flight of Alan Shepherd, and on the orbiting space telescope. In recent years, he had been an independent Professional Consulting Engineer in the Chicago area.

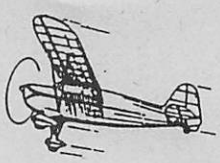
He is survived by his wife, the former Ruth Clark of Connersville; three sons, Mike of Yikpabongo, Ghana, Bill, of Merced, CA, and Greg, of Cullowhee, NC; four grandchildren; and a brother, Bob.

Thanks to the Weisenbachs ..... They sent me a WPAFB area county map to start my collection with after reading my "wouldn't it be nice..." blurb about chasing flyaways in the last Informer. Marge usually picks up a county map of the area they fly in - a good start. For a more complete look at the terrain, topographical maps are available from the U.S. Geological Survey, Washington, DC 20242. (There's probably a local outlet in your specific area.) Keep copies in your flight box.

1991 AREA CONTEST CALENDAR

Apr	5-7	Toledo, OH	R/C Show
May	5	Columbus, OH	MECA Collecto
	18-19	WPAFB	Spring Practice Sessions
	25-27		Memorial Day Weekend
Jun	1-2	WPAFB	COFFC Spring FF Meet
	6-9	Johnson City, TN	USIC/AMA Indoor NATS
	9	Sturgis, MI	M.A.M. Spring O.T. FF Meet
	8-9	WPAFB	AMA Fun Fly - R/C, C/L, Etc.
	16		Father's Day
	17-21	Lawrenceville, IL	NFFS/AMA FF NATS + NosGas Chmps
	23		
	30	Bong Field, WI	Spring O.T. FF Meet
Jul	6-7	Bong Field, WI	FAI Invitational & IMAC Meet
	13-14	WPAFB	FFMAS & Intra-City FAI FF Meet
	16-21	Lawrenceville, IL	R/C & C/L NATS
	21	Bong Field, WI	Bong Eagles FF Meet
	27-28	WPAFB	C.I.A. OT & NosGas FF Meet
Aug	4	Bong Field, WI	Pelicans FF Meet
	10-11	WPAFB	NOFFA Ann. FF Contest
	18	Bong Field, WI	Midwestern States FF Meet
	24-25	WPAFB	COFFC Fall FF Contest
	31-S2	WPAFB	FAI Semifinals
Sep	2	Bong Field, WI	Fall O.T. FF Meet
	8	Utica, MI	Michigan State Meet
	14-15	WPAFB	C.I.A. Annual FF Meet
	21-22	Sturgis, MI	M.A.M. Fall OT & NosGas FF Meet
	28-29	Lawrenceville, IL	Mid-America FF Champs
Oct	6-11	Jean, NV	SAM Champs
	13		
	19-20	WPAFB	Practice Sessions/Contest Rainout Dates
	27		
Nov	3	Columbus, OH	MECA Collecto





IFFF December '90 Indoor Kontest Results ..... The Indy club's Kat I bash on Dec. 9th didn't set any new attendance records (20 participants), but the quality of the competition was such that *5* new National Records were applied for!! Smiling faces from Illinois, Kentucky, Ohio and Indiana were to be seen. Can't figure the low turnout, tho. We even sent out twice as many contest flyers than usual, too .....

SuperSenior Don Slusarczyk, probably flying his last indoor meet as a Senior contestant went after the Category I EZB, Intermediate Stick and Autogiro records with a vengeance - moving the Intermediate Stick mark first to 14:51, then to an amazing 22:08 - totally blowing past the current Open record!! Don then moved the EZB record up to 13:04 and Autogiro to 6:52, flying a "concept model" built from bits 'n pieces of various airframes. *All three* of Walt VanGorder's Manhattan Cabin flights topped the existing record! Not a bad day's work! Here's how they finished:

IHLG		EZB		PP	
1. J.Miller	0:61.1	1. C.Slusarczyk	14:59	1. W.VanGorder	10:14
2. B.Boehm	0:56.3	2. W.VanGorder	11:45	2. C.Slusarczyk	9:50
3. C.Slusarczyk	0:52.7	3. M.Beck	3:25		
Jr/Sr J.Janes	0:31.4	Jr/Sr D.Slusarczyk	13:04		

LimPP		NoCal		Peanut		
1. C.Slusarczyk	5:59	1. T.Nied	2:35	1. J.Miller		203
2. J.Pulley	5:46	2. C.Slusarczyk	2:23/2:18	2. J.Richmond		175.5
3. J.Fierce	4:30	3. W.VanGorder	2:23/2:12	3. T.Nied		170.5
				Jr/Sr 1. D.Slusarczyk		164.5
				2. C.Colson		45.5

New Record Applications:

EZB (Open): C.Slusarczyk	17:15
ManhCab (Open): W.VanGorder	8:31
EZB (Sr): D.Slusarczyk	13:04
IntStick (Sr): D.Slusarczyk	22:08
Autogiro (Sr): D.Slusarczyk	6:52

Bostonian

1. J.Richmond	271.0
2. J.Miller	254.9
3. W.Rose	192.1

That about sums it up. Next time you get a contest flyer from this bunch, come on over and mix it up with some great flyers at a neat site. It even has a spare gym to practice in !

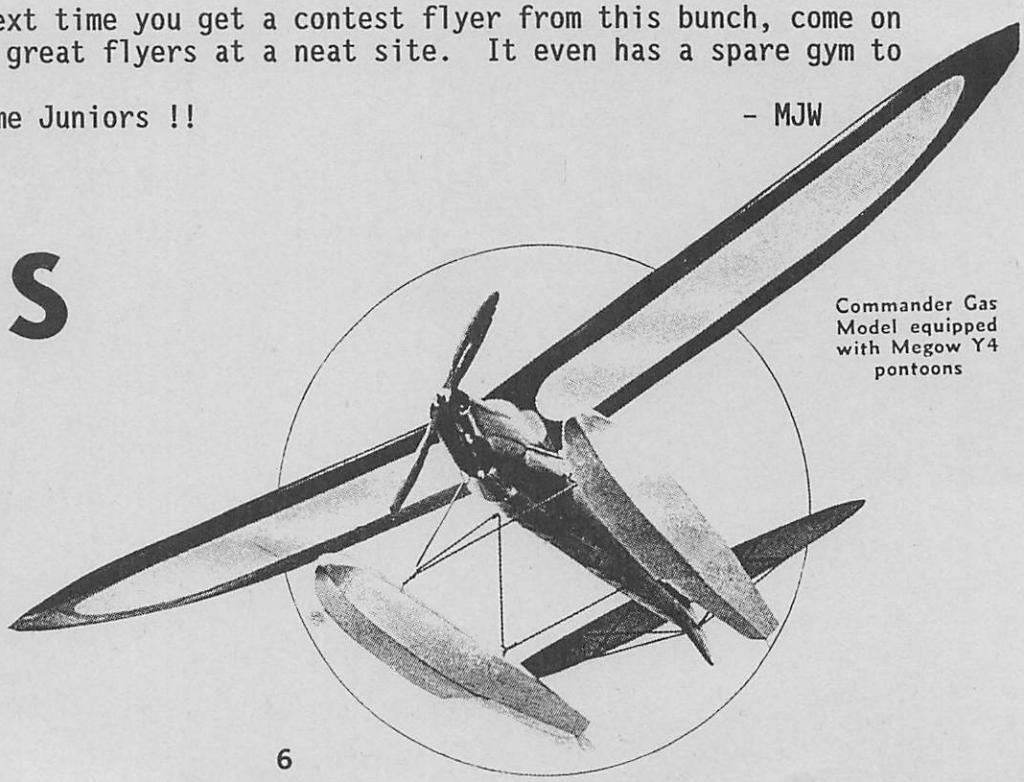
Oh, yeah. Bring along some Juniors !!

- MJW

FLOATS

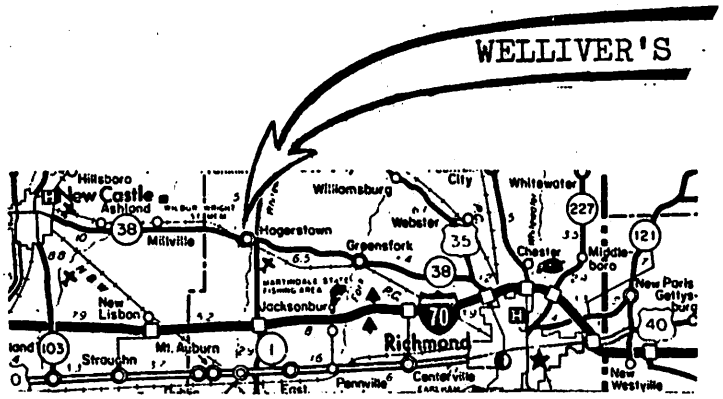
for your

GAS MODEL



Commander Gas Model equipped with Megow Y4 pontoons

C.I.A. BANQUET - January 26, 1991



The annual C.I.A whoop and holler feedbag & rock throwing affair is the next area event on the calendar. The bash is scheduled for January 26, 1991 (Saturday) at the usual place - Guy Welliver's Smorgy in Hagerstown, IN. Chow begins at 7:00 pm in the downstairs west basement room. Dinners are $13.50 each for adults (includes tip); youngsters 10-11 @ $8; 7-9 @ $6; 2-6 @ $3 (no tips involved for those under 12).

Outgoing C.IA. Prexy, Harry Murphy,gets stuck with the MC chores, lots of neat door prizes, awards, and a program you will not want to miss. Make a date with the wife for the best food around and y'all come and enjoy! Let us break all former attendance records this year - see you there!

Send proper remittance to Meredith Chamberlain, CIA Treasurer, 5810 Madison Ave., Anderson, IN 46013 by Monday, January 21, 1991. We need to give old Guy a fair estimate on the number of expected attendees so he will know how many chicken necks to wring. Please help us out on this one - and come one, come all!

THANKS GUYS!

I wish to thank all who gave up their time in answering the call for volunteer workers on "C.I.A. - Day - at - the - NATS". Particular attaboys go to my co-CD's and team mgrs., Floyd Miller and Moe Whittemore,for their efficient achievements in keeping the tables running smoothly. The 3-shift plan worked quite well because we had sufficient aid to make it work. Good Show, guys!

Next year (3rd week of June at Lawrenceville once again) the current plan is for the NFFS to step aside and return the whip to the AMA, however, the "Club-a-day" system will probably be required again to insure sufficient bodies to man the tables - more on that possibility later on. Anyway, you did good in '90, fellers! Thanks again! H.S.Murphy

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CAMERA TIMER FLASH!

The good news is that apparently a rather large stockpile of the last model of the famed K-mart camera timer (the one with the arm instead of the wheel) has been recently unearthed in Japan. However, the bad news is that the price is $15 each. This is a bit steep in my book, but if you find yourself up-the-creek-without-a-timer and cannot live a minute longer without one, send your orders to Jorge Triani, 3713 73rd Street East, St. Paul, MN 55076 - or phone 613-552-0057 if you care to try your luck at cutting yourself a better deal. Tell'em you heard about it from a C.I.A. INFORMER!

LOST HILLS SITE PURCHASED

A group has been soliciting funds for sometime with a goal being to buy a 630 acre flying site of CA desert in the Lost Hills area. Some $60K plus had been raised and plans were being laid to purchase the first half when in walks a benefactor and plunks down the entire amount - then offers the purchase to the group free of charge. Who says a single person doesn't make a difference? The original $60K is now on its way back to its donors.

NEW O.T. EVENT PROPOSAL

The relatively new 1/2A Texaco Free Flight event seems to be doing well out West, but it "ain't for everyone. An event with engine runs that permit over 8 minutes of "power-on" would have difficulty in containing a model within the confines of most limited area flying sites. Therefore, it would appear that this event is primarily a "desert only" event. Shucks, and it sounds like lotsa O.T. flying fun, too. So, "How do we less fortunates who are denied-the-desert get to play?" sez I.

Well, how about a scaled down 30 Second Antique with a limited engine run as a compromise solution? That is to say, a 1/2A 30 Second Antique event. The idea being to utilize 1/2A size engines of course with rules such to encourage about a 3-1/2 to 4 foot version of any of those designs which are already eligible for the current 30 Second Antique event. This way everyone can play regardless of whether or not you are blessed with a desert flying site in your backyard.

Therfore, in an attempt to accomplish the vision, the following is proposed:

1/2A 30 Second Antique Event

This event is intended for leisure free flight competition with any S.A.M. approved pre-1939 non-pylon model design to be powered by a reed valve glow engine with a maximum engine displacement of .050 cu. in. Diesel engines are to be prohibited. Models may be scaled up or down from the original size, however, construction shall follow that of the original with wood sizes scaled accordingly as is practical. Model size is to be unrestricted, however, the model must weigh a minimum of 12 ounces.

In the interest of aiding Contest Directors, it is recommended that a label be permanently affixed to the model which is to declare: model name, design source, actual wing area, plus the scale factor.

Flight Rules shall be at the discretion of the individual CD's, with regard to site and weather conditions, however, the following is suggested:

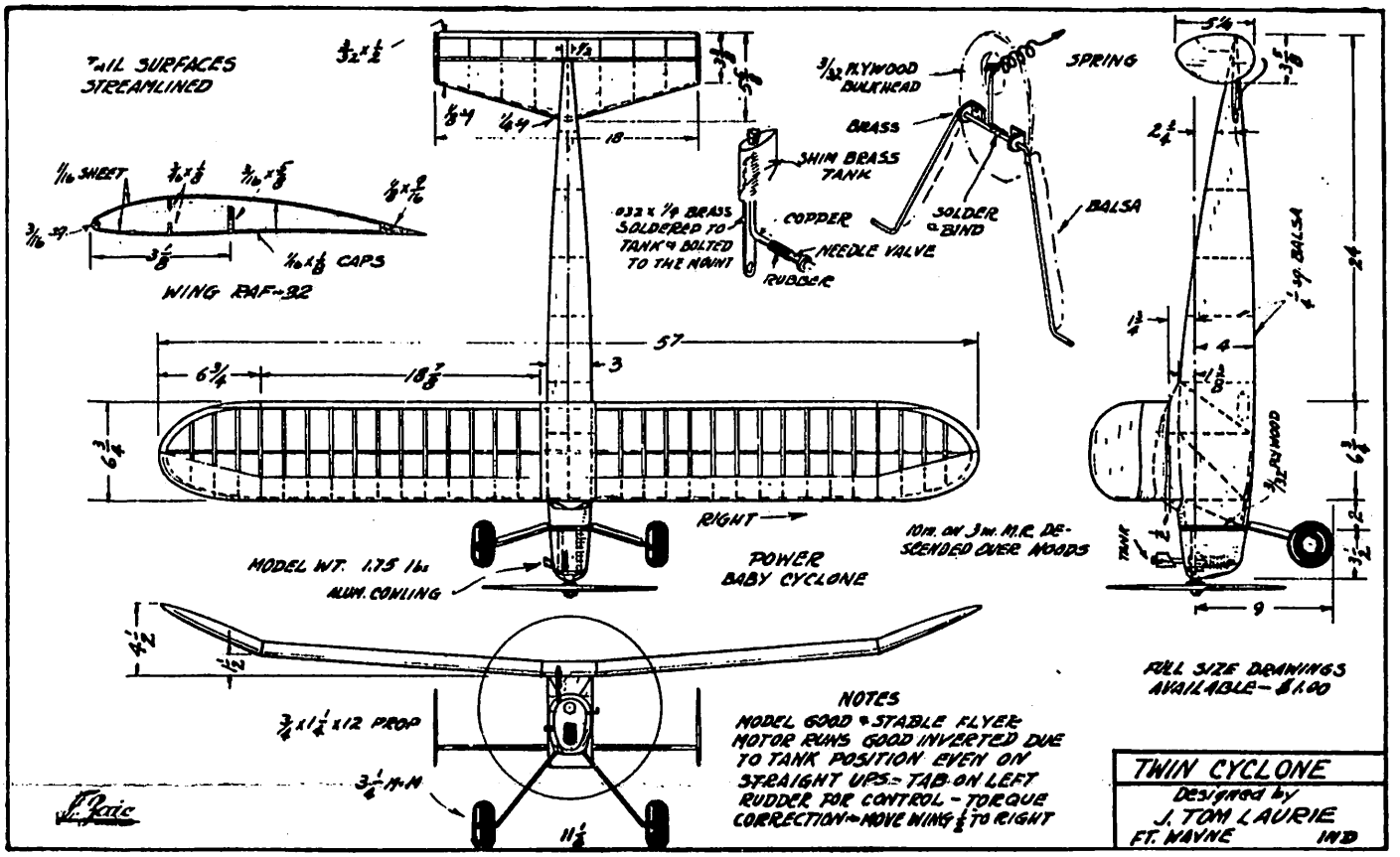
- 30 second maximum engine run.
- All launches to be R.O.G.
- 6 attempts to make 3 official flights.
- Any flight over 40 seconds is an official flight.
- Official flight maxes shall be 2 minutes.
- Final score shall be the sum total of 3 officials.
- Flyoff rules shall be at CD's descretion, but cutting each succeeding engine run by 5 seconds is recommended.

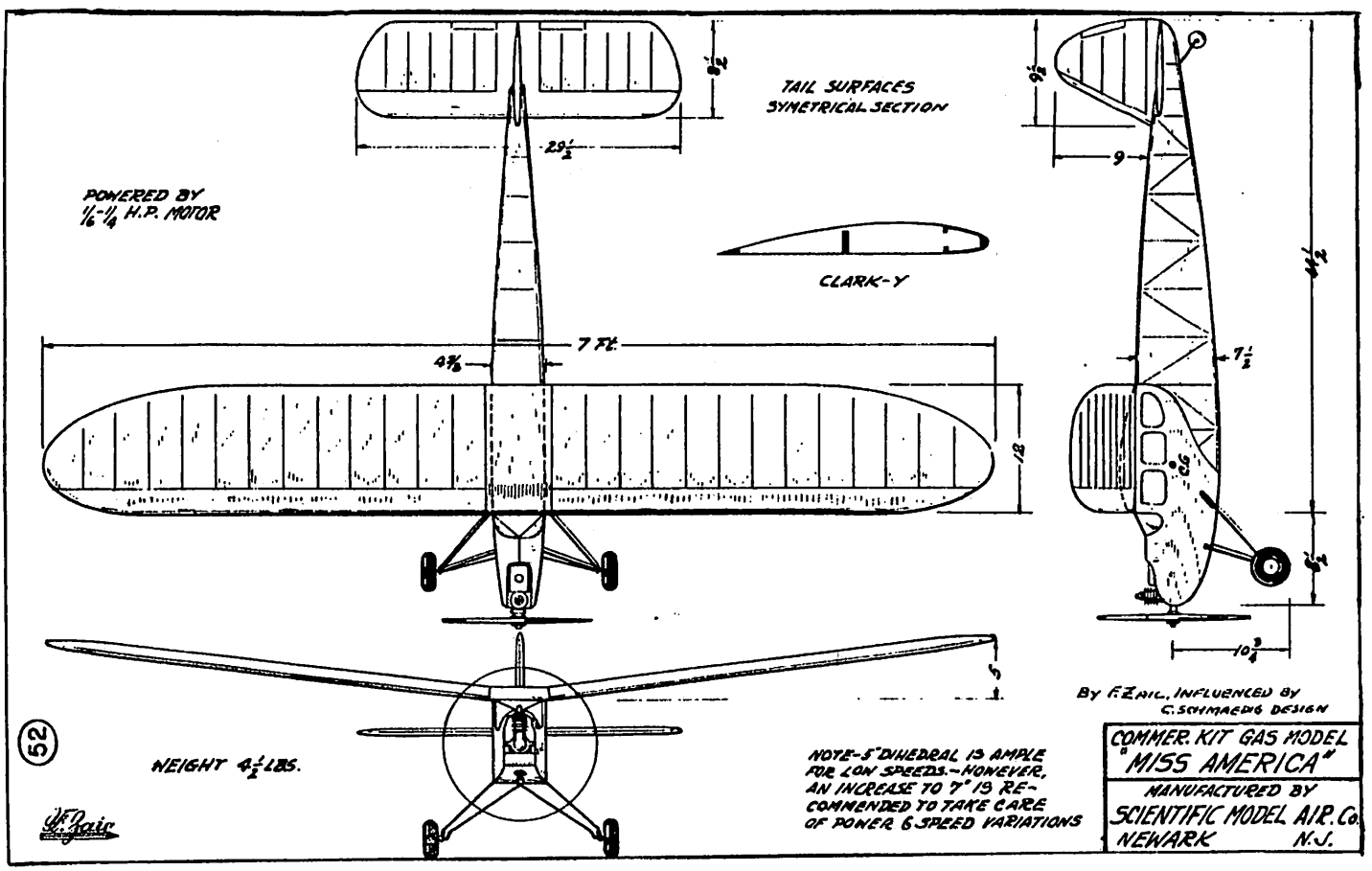
C.I.A. 11/25/90

These rules would appear to accept a number of the current sizes of the designs which are already scaled to meet 1/2A R/C Texaco rules, so plans on some designs should be relatively easy to obtain without the labors of any drafting chores.

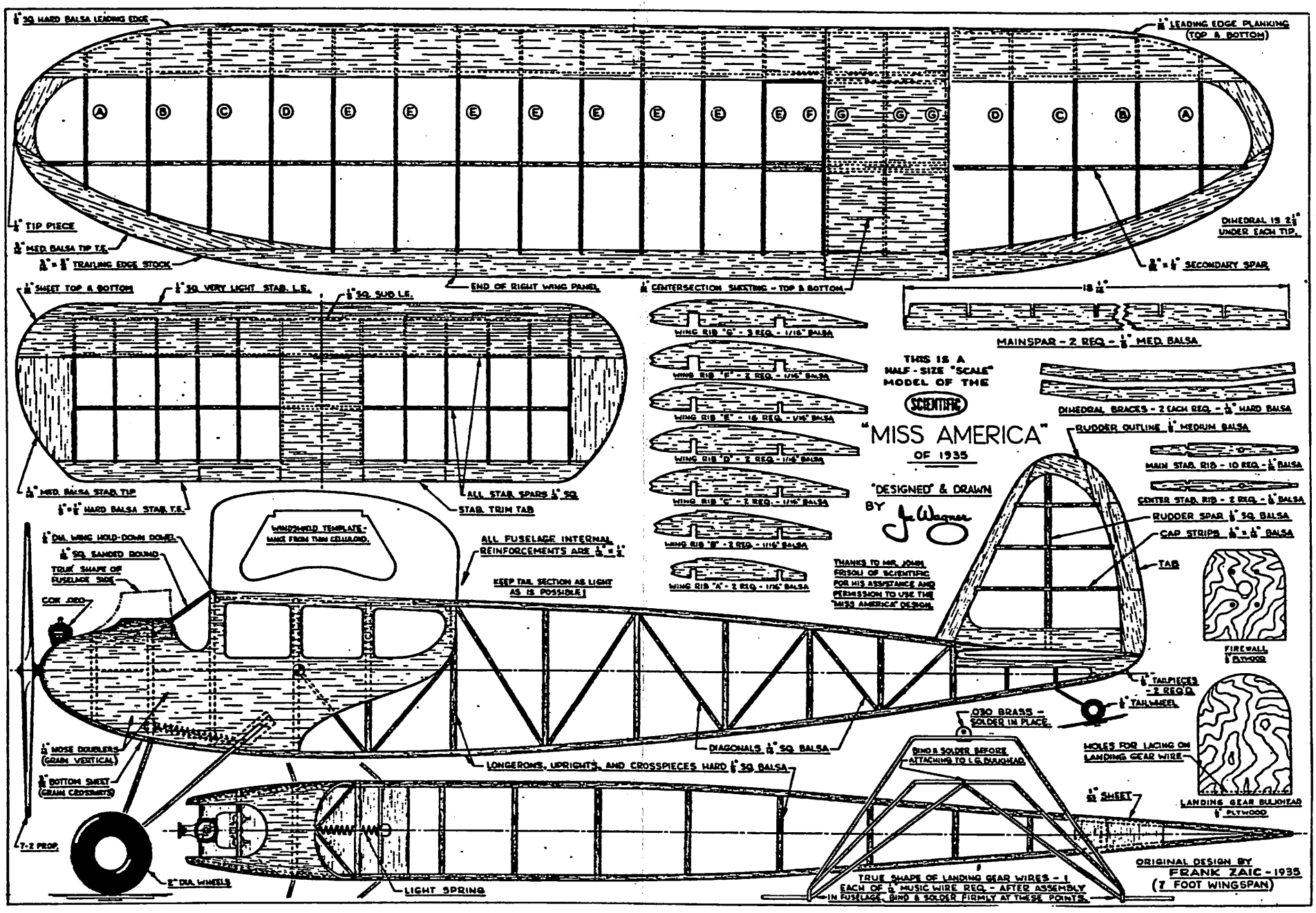
A special event for the above will be included on the event card at the 1991 C.I.A. O.T. and Nos Gas Contest of July 27/28 at WPAFB, Dayton, OH. Therefore, you have about 8 months-to-target. Get'em ready, guys!

The Zaic Yearbooks are fine places to begin looking for design possibilities for a 1/2A 30 Second Antique event project. Here are a couple of designs to be found therein. It would appear that an approximate 48" model would be the optimum size to lug the 12 oz. min. weight requirement.





Full size plans of most S.A.M. Antique designs are available from the John Pond O.T. Plan Service, and other similar sources. Scaling may be easily accomplished by taking your selected construction plan to an engineering company which is equipped with those new exotic do-dads which blow-up or reduce your subject to any size desired. Space-age technology sure do make it easy for O.T. enthusiasts to do their thing. Here is a plan for an exact 1/2 size model intended for an .020 engine at 9 oz. of flying wt. (42"). Blown to about 48" and 12 oz. min. wt. - yagotit!



OTHER PLANS (Literally)

Nostalgia Gas buffs are advised that the Lutz flatbottomed airfoil .09 ZEEK as well as the Mahieu/Cranford 575 ZEEK have been added to the list of approved Nos Gas designs. Bob Larsh has advised of other interesting items which are presently on the burner for this increasingly popular series of vintage gas powered events - however, patience is required to permit time to properly process the proposals.

Bob Klipp who minds the store at the NFFS Plan Service shop has advised of 3 new plan adds now available from his shelves. They are: Bruce Kimball's LYNN II, a 20' built-up wing HLG @ $3 ($4); Doug Galbreath's SUMMERWIND, an FAI power ship and '80 NFFS MOY selection @ $5 ($6); and Jim Clem's JAVELIN XL, a Federation ROG for the relatively new Indoor event @ $3.50 ($4.50). The first figures are NFFS member prices, the second for non-members - it pays to belong. Add 20% for postage and handling. Bob's address is 10115 Newbold Dr., St. Louis, MO 63137. Ask him for an updated complete plan listing when you order - or send a SASE first for the list.

RE-ENLISTMENT TIME (for some)

This is our final issue for 1990 and this means another year is about to end up in the record books. Also, for many C.I.A. members and INFORMER subscribers your membership or subscriber credit has run out as well. Check the code after your name on the mailing label attached to this issue. If it says "6/90", your last issue has just arrived. Remember, the "6" signifies the 6th and last issue of our rag for this year and not the sixth month of the year which seems to still confuse a few now and then.

Postage rates escalate on January 1, 1991 - but we shall retain our '90 rates into '91. We hope you all enjoy the contents of our communication vehicle and will continue to support our efforts for another year.

As most of you know the yearly contest schedules for our area are assembled by C.I.A. personnel as soon as possible after the close of each outdoor flying season. This issue contains our efforts to date for '91. The AMA is coordinating AMA Districts 3, 6, & 7 this year as an experiment to test theirprowess to handle the chore from DC hqtrs. They have been sent our schedule which should make the FF chore for these districts a piece-of-cake. Hqtrs will also be kept updated on any ensuing revisions. 'Tis your C.I.A. at work - thanks for your support!

Cut along dotted line and send the form and remittance to address below

CENTRAL INDIANA AEROMODELLERS - Club Membership/INFORMER Subscription Form

Name _____ **AMA#** _____ Expiration Code [ ] (Office use only)

Address _____

City _____ **State** _____ **Zip** _____ **Ph#** _____

Circle Fee that meets your situation: **Age last July if under 19** _____

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Please send this form and proper remittance to Moe Whittemore, 2348S, 700W, New Palestine, IN 46163. Thank You for your support of free flight!

The INFORMER

2348S, 700W
New Palestine, IN
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1990 President
Harry Murphy

Vice President
Dick Covalt

Sec'y/Treasurer
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Issue No. 6-90